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ABSTRACT

This volume, third in a series evaluating the Child and Family Resource Program (CFRP), provides an overview of the evaluation, documents the first 6 months of the study, and examines initial program impact on families. Chapter 1 briefly summarizes the design of the CFRP evaluation and addresses the issues of sample selection and attrition, data collection procedures, and analytic strategies. In chapter 2, profiles are presented of the participating families and children. Chapter 3 provides a brief overview of program services along with a profile of CFRP staff, additionally examining the relationship between the CFRP staff and families, families' and staff's expectations, and the extent to which the views of staff and families were congruent. The impact of the CFRP on families and infants after 6 months of program participation is the focus of chapter 4. Also described in this chapter is preliminary program impact in relation to changes in four outcome domains: (1) family circumstances (i.e., employment, education, income, housing, and so on), (2) maternal and child health, (3) parent/child relationships and interaction, and (4) family capacity for independence (use of community resources, locus of control and coping strategies, and affiliation with family and social networks). Finally, chapter 5 presents preliminary conclusions of this phase of the CFRP evaluation and gives recommendations for the future direction of evaluation. Related materials are included in six appendices. (MP)

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Acting Project Director
Marrit J. Nauta

Project Officer
Dr. Esther Kresh

Principal Authors
Marrit Nauta
Lorelei Brush
Lynell Johnson
Dennis Affholter
Kathryn Hewett

with

Lucy Algere-Knox
David Connell
Rosalind Ladner
Jan Stepto

Editors
Nancy Irwin
Lynell Johnson

EVALUATION OF THE CHILD AND FAMILY RESOURCE PROGRAM (CFRP)

Phase II Report

Volume I: Research Report

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FOREWORD

In 1973, the Administration for Children, Youth and Families (formerly the Office of Child Development) initiated the Child and Family Resource Program (CFRP) as part of the Head Start Improvement and Innovation effort. CFRP was funded as a demonstration program with the intent of developing models for providing services to low-income families with young children--models which could be adapted by different communities serving different populations. There are eleven CFR programs across the country, one in each of the ten HEW regions and one representing the Indian and Migrant Division. Each program receives approximately $130,000 per year to serve a minimum of 80 families.

CFRP is a family-oriented child development program which provides support services crucial for the sustained healthy growth and development of families who have children from the prenatal period through age eight. It promotes child development and meets children's needs by working through the family as a unit and provides continuity in serving children during the major stages of their early development. This is accomplished through three program components: (a) an infant-toddler component serving parents and their children in the prenatal-through-three age range; (b) Head Start for families with three- to five-year-olds; and (c) a preschool-school linkage component to ensure smooth transition from preschool into the early elementary school grades. Another distinctive feature of CFRP is its emphasis on a comprehensive assessment of each family's strengths and needs and the development with the family of an individualized plan for services to be obtained through CFRP. Families enrolled in CFRP receive the same comprehensive services that are offered by Head Start and additional services tailored to the needs of each family. At the same time, CFRP works to reduce fragmentation and gaps in the delivery of services by existing community programs and agencies.

In October 1977, the Administration for Children, Youth and Families funded a longitudinal evaluation to determine the effectiveness of the Child and Family Resource Program. The evaluation includes the following components:

- a program study, designed for the purpose of developing a comprehensive picture of the operations of CFR programs across the country and identifying program variables for use in the in-depth study;
- an in-depth study, designed for the purpose of examining the provision of CFRP services at six sites to a sample of families randomly assigned to CFRP treatment, and associations between such services and selected outcome variables;
- an experimental impact study, designed for the purpose of determining the impact of CFRP services on families by means of comparisons of outcome variables in the CFRP sample and in a sample of families randomly assigned to a control group.

This is the third in a series of CFRP evaluation reports. The first report presented the overall study design. Study implementation and the collection of baseline data on evaluation families were the focus of the second report. This third report consists of two volumes. Volume I provides an overview of the evaluation, documents the first six months of the study, and examines initial program impact on families. In Volume II, descriptive information is presented about CFRP operations at the six evaluation sites. This volume provides a broad framework for understanding program impact on study families, which is the focus of Volume I.

Volume I is organized in five chapters. Chapter 1 briefly summarizes the design for the CFRP evaluation and addresses issues of sample selection and attrition. Also included is a discussion of data collection and analytic strategies. In Chapter 2, profiles are presented of the families and children who are participants in the study.

Family participation in CFRP is the focus of Chapter 3. A brief overview of program services is provided, as well as a profile of CFRP staff who work most closely with evaluation families. In this chapter, we examine the relationship between staff and families, their perceptions of the program, and their expectations, as well as the extent to which staff and families have congruent views. Also reviewed is the needs assessment and goal-setting process, and level of family participation in various program activities. At issue is the extent to which program services are individualized to meet family needs--a CFRP mandate--and level of family satisfaction with the program.

The impact of the CFRPs on families and infants after six months of participation in the program is the focus of Chapter 4. Differences in means between the CFRP families and those in the control/comparison group are tested in an attempt to identify any major program impacts on families and infants in the first six months of program participation. Program impacts after only six months would have to be quite dramatic to be detectable with such simple tests. An important reason for conducting and reporting them despite these limitations is to help focus attention on a number of issues in planning the continuing data collection and analysis effort. Such issues include improving the quality of our measures, identifying information gaps, particularly with respect to covariates that will be important in developing statistically more powerful tests of program impacts, and finding areas of promise for further attention in describing treatment processes and family outcomes. Also included in Chapter 4 are initial explorations of relationships between CFRP treatment variables and outcomes for CFRP families. These explorations are required for later development of covariable models. Without such models, it will not be possible to address one of the key policy questions behind this evaluation, concerning types of families that benefit or are likely to benefit most from the services provided by CFRP.

Chapter 5 presents preliminary conclusions of this phase of the CFRP evaluation. In addition, recommendations are made in this chapter for the future direction of the CFRP evalution, based on what was learned during the first six months.

Volume II of this report provides descriptive information about CFRPs at the six evaluation sites. Included are discussions about the manner in which programs are organized and staffed, staff characteristics, the relationship of CFRP with Head Start and other social service agencies in the community, services offered, and the characteristics of families enrolled in CFRP.

Acknowledgments

The first two phases of the CFRP evaluation were large and complex in scope and could not have been completed without the assistance of numerous people. Several of these people deserve special recognition for their contribution to the evaluation effort.

We wish to thank our ACYF Project Officer, Dr. Esther Kresh, for her continuing guidance and assistance during the first two phases of this evaluation. She played a vital role in the redesign of the evaluation during its first phase. We

also want to express our gratitude to Dr. (Ruth) Ann O'Keefe, former director of the CFRP demonstration, and to Ray Collins, Chief of the Development and Planning Division at ACYF, for the interest, enthusiasm, and guidance they have provided during the course of this evaluation.

Special thanks go to the directors and their staffs at the six CFR programs that were selected for the evaluation. They provided valuable assistance in study implementation by recruiting families and securing their willingness to participate in the study. Staff provided us with a broad understanding of the operations of CFRP by devoting endless hours to the completion of records on individual families and by responding to questions about various aspects of the CFR program. We also wish to thank the program directors in the five CFRPs that were not directly involved in the evaluation for providing information about their programs and the communities they serve.

The parents of families in both the CFRP and control/comparison groups at each of the six evaluation sites have played a major role in the study. They spent numerous hours providing information about their infants and families, and some were involved in an in-home video project which collected information about interactions between mother and child. Finally, thanks go to the infants at the six sites who were tested in the fall to obtain data on their development.

The National Advisory Panel also deserves special recognition for their guidance and assistance during the project's first phase. Special thanks go to Jessica Daniel, who provided technical assistance to project staff on an ongoing basis, and to Jean Carew of Research for Children Inc., who became a subcontractor during the project's second phase. Research for Children Inc. provided valuable assistance in the implementation of a small pilot study using Jean Carew's

TIES Observation System. RCI staff also were responsible for coding the observation tapes and for providing guidance in analytic tasks. Other panel members we wish to thank for their contributions to the project are: Tony Bryk, Luis Laosa, Frank DiVesta, and Walter Allen (who joined the panel during the second phase).

We also want to acknowledge the work of Abt Associates staff who played major roles in the first two phases of this evaluation: Kathryn Hewett directed the project from its inception to study redesign and implementation; since early fall (1979) she has served as a senior analyst responsible for analyses concerning capacity for independence and coping. Dennis Affholter has skillfully managed and guided complex data processing and analytic tasks; he has been assisted by Lucy Algere-Knox, coding and data entry supervisor who handled the seemingly endless tasks of sorting, coding, organizing, and supervising staff with competence, and Roz Ladner, who provided valuable programming support. Thanks also go to Dave Connell for directing two pilot studies, Lynell Johnson for his work on the program study and the preparation of Volume II of this report, and Lorie Brush for her role in analyzing a wealth of process and treatment data. Ilona Ferraro, with Jan Stepto, Elaine Mason, and Lucy Algere-Knox, anchored the management of all field operations--testing of infants, in-home observations, parent interviews, and program data collection. We also wish to acknowledge the special role of research coordinators and interviewers at the six CFRP sites who had responsibility for data collection and tracking of families. Their enthusiasm for and commitment to the project has been exceptional. Finally, special thanks go to our administrative and secretarial staff for the numerous ways in which they assisted project staff--Patricia McMillan, Annie Hondrogen, and Kathe Phinney.

Marrit J. Nauta
Acting Project Director

Chapter 1

OVERVIEW OF THE CFRP EVALUATION

In this introductory chapter, we provide a general description of the CFRP evaluation to serve as the context for the information presented in subsequent chapters. We begin in Section 1.1 by reviewing briefly previous research on the CFRP and outlining the policy questions that the present evaluation is designed to answer. Section 1.2 in turn presents the research design developed to address these issues and the timetable for implementing this design. The three component studies are described as they relate to the research issues, to the timetable for data collection and analysis, and to one another. We turn next to the selection of the CFRP evaluation sample and factors which have influenced sample size, including attrition (Section 1.3). In Section 1.4, we describe the data-collection effort--methods of inquiry, instrumentation, staffing, and timetable. The chapter concludes with a brief summary of analytic strategies employed in the first six months of the CFRP evaluation (Section 1.5).

1.1 Policy Questions and Research Context

The current evaluation of the CFRP, initiated in 1977, was preceded by two other studies of the program, both also funded by ACYF. The first, conducted by Huron Institute in 1974-75, was an effort to determine the feasibility of a summative evaluation of CFRP. On the basis of this study, ACYF decided that a summative evaluation in the early stages of CFRP probably could not uncover meaningful impacts of the program on families and children. A formative evaluation of CFRP was also undertaken in 1974-75, by Development Associates

Inc. That study examined strengths and weaknesses of the planning process, implementation of CFRP guidelines, resource utilization, and service provision during start-up of the program. A follow-up study was undertaken by the same contractor in 1975-77 to determine the extent of implementation of the CFRP program components, as well as the effectiveness of the program in promoting the desired outcomes in parents and children.

The current evaluation was initially intended as a continuation of the studies of the CFRP by Development Associates. Following a review of the original design, however, plans were developed for a new longitudinal evaluation of CFRP, in which families with children under one year at the start of the study would be followed until the children entered first grade. Such an evaluation is being undertaken to aid ACYF in making informed decisions about the expansion of CFRP models or of some of their important features within Head Start.

To this end, the CFRP evaluation addresses two major policy questions.

- What should be the nature and extent of services provided to families to enhance their children's development? What processes are most effective in providing such services?

- What should be the nature and extent of the continuity of services delivered to children? For how long and through what processes should such continuity of services be provided?

These broad policy questions have been translated into several more specific questions, which the evaluation is designed to answer.

- How is CFRP defined and carried out at all 11 sites? Specifically, how does it work for individual families in terms of:

  --individualization of services;

  --family assessment and planning;

  --developmental services for children in three age groups: infant-toddler, Head Start, and transition to school (preschool-school linkage);

  --family support and involvement, including parent education; and

  --coordination of resources.

- What distinct models of CFRP are identifiable among the 11 demonstration programs?

  --What adaptations of the basic three components of CFRP (infant-toddler, Head Start, preschool-school linkage) and the common CFRP processes (assessment, goal-setting, planning, service delivery) characterize these models?

  --What types of staff, program operations, service packages, and families served are characteristic of these models?

- What characteristics of families, CFRP staff, and CFRP activities/services are associated with outcomes and changes in families served by CFRP?

- What changes or outcomes can be identified in families who have participated in CFRP compared with families who have not participated?

1.2 Design and Timetable of the CFRP Evaluation

As mentioned above, the evaluation is to follow families with children under one year at the start of the study until those children enter first grade in 1984. Phase I of the study began with the funding of the project in October 1977 and lasted for 19 months. During this period the design of the longitudinal study (see below) was revised and implemented. Families were recruited for the study in summer 1978, and baseline data were collected during site visits and interviews in fall 1978. Phase II began with site visits conducted in spring 1979 and ended after the data-collection effort conducted in fall/winter 1979. (Subsequent phases will likewise be one year in length, and data for each phase will be collected either once or twice per year.) The present report is based on data from fall 1978 (Phase I) and spring 1979 (Phase II).

Phase II was designed to encompass two pilot studies in addition to the collection of evaluation data. The first, an assessment of infant development, is based on information gathered in Oklahoma City and Salem. The second pilot study is an assessment of parent/child interaction, based on observations conducted in the home at the same two sites. Both pilot studies took place in spring 1979. The findings of these pilot studies are included in the present report.

With this timetable for data collection in mind, we will now consider in some detail the design of the evaluation. Most data collection for the evaluation is restricted to 6 of the 11 CFRP sites: New Haven, Connecticut; St. Petersburg, Florida; Jackson, Michigan; Las Vegas, Nevada; Oklahoma City, Oklahoma; and Salem, Oregon.* These 6 sites were not selected randomly, nor are they necessarily representative of all 11 CFRPs. They were selected for their capacity to yield samples of families that would meet the demands of the evaluation design.

The CFRP evaluation consists of three distinct but related component studies: the program study, the in-depth study, and the impact study. Each component study draws on baseline data from Phase I and on continuing data collection in subsequent phases. Taken together, these three studies address the four objectives mentioned above:

(a) the description of CFRPs and their operations;
(b) the identification of program models;
(c) the linking of family outcomes to particular aspects of CFRP treatment (characteristics of the staff and program) and to family characteristics; and
(d) the linking of family outcomes to participation or non-participation in CFRP.

In the course of the program study, we will gather data on the characteristics of the programs and staff, families and communities participating in the CFRP demonstration and evaluation. The greater share of these data were collected during the site visits in fall 1978 and spring 1979, although data from later phases will be incorporated.** The program study relies heavily on a qualitative, sociological, case-study methodology. The aim here is to develop and communicate a broad, integrated understanding of each of the CFRP implementations. Ultimately, the program study is both the source of speculations that motivate ongoing data collection and analysis activities and the study component in which plausible explanations for all findings will be and must be constructed. Analytic strategies must be wide-ranging and open-ended to accommodate this dual purpose.

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* These six sites comprise the sample for the in-depth study, the impact study, and most aspects of the program study (see below). Although it was originally planned to implement the program study fully at 11 sites, this proved infeasible, and only minimal data for the program study have been collected at 5 of the sites.

**Some data were collected in fall 1978 on the five CFRP sites not included in the in-depth and impact study sample of six sites. This information, however, was gathered through telephone interviews and is strictly limited.

In the in-depth study, we delve in greater detail into the characteristics of CFRP families, staff, and programs. Data are being obtained through interviews with families and CFRP staff, as well as from program records of services, referrals, family goals, and family participation in program activities. In this way, we take a closer look at the nature of CFRP treatment--the processes used in the planning and delivery of services, and the extent to which services are individualized.

Results from the in-depth study will be used in combination with those of the program study to address objective (a) above--the description of CFRP services and operations--and objective (b) above--the development of program models. To date, the identification of CFRP models has met with only limited success because programs are few in number and disparate in nature. The in-depth study is also designed to address objective (c) above--exploring relationships between outcomes for families and aspects of CFRP treatment.

Finally, the impact study addresses objective (d) above through random assignment of families at each site to a group of CFRP participants (treatment group) and a group of non-participants (control/comparison group), and comparison of outcomes in the two groups. Data sources include interviews with all families and with CFRP staff who work most closely with families in the treatment group.

The in-depth and impact studies rely more heavily than the program study on quantitative analytic strategies although, again, the program study sets the context in which quantitative analyses are done. For the most part, the statistical techniques are exploratory and descriptive, although some data reduction and hypothesis testing will be discussed in this report.

1.3 Sample Selection and Attrition: The Six Sites

Recruitment of families for the CFRP evaluation took place during the summer of 1978 at the six sites selected for participation in the impact and in-depth studies and for full implementation of the program study. The design called for 120 families per site, each with an infant under one year of age. Families were randomly assigned to the CFRP treatment group or to a control/comparison group by Abt Associates Inc., to enable comparisons to be made between families receiving program services and those not receiving services. The CFRP treatment group was to consist of 40 families per site and the control/comparison group of 80 families--twice as many--because it was anticipated that attrition would be significantly greater for the control/comparison group than among families enrolled in CFRP.

The total sample goal, then, was 720 families--240 in the CFRP group and 480 in the comparison group. A total of 637 families were in fact recruited by CFRP staff during summer 1978 (an average of 106 families per site). At two sites, Jackson and New Haven, recruitment proved especially difficult; these sites started out with sample sizes of less than 100.

Two factors reduced this total sample significantly. First, attrition averaged 19.5 percent across all sites prior to start-up and during the course of the fall 1978 data collection, reducing the total sample to 513 families--an average of 40 CFRP families and 46 comparison families per site.*

Second, it was decided subsequent to preliminary analysis to exclude from the sample a group of families who had participated in Head Start prior to entering the CFRP evaluation. These families had originally been assigned to the comparison group rather than being randomly assigned to treatment or comparison. Because the inclusion of Head Start families in the evaluation could obscure the impact of CFRP, the final fall sample excludes families with prior Head Start experience and consists of only 466 families--an average of 39 CFRP families and 38 comparison families per site.** This, then, is the group of families who comprised the fall analytic sample. Table 1-1 summarizes the process of arriving at this analytic sample through recruitment, attrition, and exclusion of Head Start families.

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* Preliminary analyses of baseline data showed the CFRP and comparison groups to be essentially equivalent; see CFRP Evaluation Report No. 2, March 19, 1979.

**Analyses showed the CFRP and comparison groups in the fall analytic sample to be equivalent; see Appendix A.

Table 1-1

Derivation of the Fall 1978 Analytic Sample

	Number of Families		
	CFRP*	Control/Comparison	Total
Sample goals	240	480	720
Recruited summer 1978	240	397	637
Sample after attrition (fall 1978)	240	273	513
Final analytic sample after excluding Head Start families (fall 1978)	236	230	466

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*Although not apparent from the table, attrition occurred in both groups. The size of the CFRP group was kept constant by replacing attrited CFRP families with families in the control/comparison group. Replacement families were randomly selected.

Table 1-2 shows the further attrition that took place in the analytic sample (i.e., excluding Head Start families) between fall 1978 and the spring 1979 data collection. Attrition averaged 17.2 percent for the sample as a whole. Spring sample sizes were 188 for the CFRP group and 198 for the control/comparison group, an average of 31 CFRP families and 33 control/comparison families per site. Contrary to expectations, attrition from the CFRP treatment group was considerably higher than from the control/comparison group--20 percent vs. 15 percent across all sites. The reasons for the high CFRP attrition rate are not apparent.

The attrition rate during the first six months of the evaluation raises serious questions about the long-term viability of this study as a longitudinal impact evaluation of CFRP. If attrition were to continue at a comparable rate in subsequent study phases, sample sizes at each site would be reduced to 9 CFRP families and 15 control/comparison

Table 1-2

Fall and Spring Sample Sizes and Sample Attrition by Site and Group

	CFRP			Control/Comparison		
	Fall	Spring	Attrition	Fall	Spring	Attrition
Jackson, Michigan	40	31*	25.0%	24	20	16.7%
Las Vegas, Nevada	42	32	23.8%	43	33	23.3%
New Haven, Connecticut	36	28	22.2%	20	18*	15.0%
Oklahoma City, Oklahoma	39	32	17.9%	49	45	8.2%
St. Petersburg, Florida	40	34*	17.5%	43	40*	9.3%
Salem, Oregon	39	31	20.5%	51	42	17.6%
TOTAL	236	188	20.3%	230	198	14.8%

*Includes one family interviewed in the spring but not in the fall. The families were part of the random assignment but could not be reached in the fall.

families in the fall of 1981, when target children are expected to enter Head Start. Many of the analyses currently under consideration would not be feasible with sample sizes of this magnitude.

Issues related to study implementation and sample attrition are discussed at greater length in Appendix B. Preliminary information is also presented there on reasons for sample attrition and the effects of attrition on group equivalency.

1.4 Data Collection and Instrumentation

Data collection for the three component studies took many forms during the first year of the evaluation. Data were collected by Abt Associates' Cambridge staff directly and by site staff hired and trained for that purpose. In addition, much information was supplied by CFRP staff by filling out questionnaires and providing records of individual families.

Data for the program study were obtained during two site visits (fall 1978 and spring 1979) to the six study sites. (Brief telephone interviews were conducted with the five other CFRP sites in the fall.) The fall site visits, which lasted approximately a week at each site, had two purposes: the collection of data about various aspects of the program and the training of CFRP staff in ongoing data collection systems designed specifically for use in the study.

Program data were obtained through interviews with the local CFRP director, specialists, and other program staff. These interviews focused on the community in which CFRP operates, available community resources to serve family needs, and program linkages to social service agencies. Information was also obtained about program organization, policymaking, staff and family recruitment, and staff responsibilities and supervision. Other interviews explored various aspects of program operations, such as assessment and goal-setting, the process used in working with families, parent involvement, and program services offered to families in each of the three program components: infant-toddler, Head Start, and preschool-school linkage. In addition to conducting interviews, site visitors observed a home visit, an infant-toddler session, and a parent meeting. Demographic data on CFRP families and staff were also obtained in the fall using self-administered questionnaires or forms completed from existing program records.

CFRP staff who work most closely with families in the evaluation sample were trained during the fall site visit in three data collection systems to be completed quarterly and used for the in-depth study: Family Participation in Program Activities, Referrals, and Goal Attainment.

The spring site visits explored several aspects of program operations in greater depth, such as the assessment process, the preschool-school linkage component, and resources available in the community.

Data for the in-depth study come from several sources: staff background questionnaires, staff and family interviews, and checklists of family status characteristics. Data from staff for the in-depth study were obtained through self-administered questionnaires and personal interviews conducted by AAI research coordinators at each site. Interviewers, under the direction of a research coordinator at each site, conducted interviews with families. Data were obtained on family expectations for CFRP, family-staff relationship, staff expectations for family success, staff perceptions of the family, family status ratings, goals, services, and level of family participation. The fall and spring questionnaires sought similar data from both families and staff. In the fall, however, many staff members could not respond to some questions because of the limited amount of contact between staff and families.

The impact study interviews were also conducted by on-site staff. The impact interviews with CFRP and comparison families covered five outcome domains likely to be affected by family participation in CFRP:*

- family circumstances (employment, education, family composition);
- maternal and child health;
- parent-child relationship and interaction;
- child development and achievement; and
- capacity for independence (use of community resources, locus of control and coping strategies, affiliation with family and social networks).

During the first six months of the evaluation, data on these variable domains were obtained primarily through parent self-report. For measures of maternal and child health, an attempt was made to obtain birth records of children in the evaluation sample through State Bureaus of Vital Statistics. To date, birth data have been provided on only a small percentage of the children; efforts continue, however, to obtain this information.

The activities included in the evaluation data collection effort are summarized in Table 1-3, and are described in further detail in Appendix C.

As previously mentioned, two pilot studies were conducted in the spring as a direct assessment of child development and parent-child interaction. Both pilot tests were conducted at two sites: Oklahoma City, Oklahoma and Salem, Oregon. Data on the development of children were collected using the Bayley Scales of Infant Development. The pilot test sample consisted of 43 children (19 CFRP and 24 control) between the ages of 15 and 18 months. The

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*These outcome domains were described in detail in a technical appendix to CFRP Evaluation Report No. 2 (March 19, 1979).

Table 1-3

Summary of Evaluation Data Collection*

Frequency		Substudy	Collected or Provided by
Fall 1978	Spring 1979		
		Program Study	
X	X	Interviews with staff and observations of program activities during site visits to 6 impact study sites	AAI Cambridge staff
X	X	Telephone interviews with staff at 5 non-impact study sites	AAI Cambridge staff
X		Questionnaires about staff and family demographics	CFRP staff
		Impact Study	
X	X	Interviews with families: CFRP and comparison	AAI site staff
X		Health records of birth circumstances	AAI Cambridge staff
	X	Infant assessment (pilot test at 2 sites)	AAI site staff
	X	In-home observation (pilot test at 2 sites)	AAI site staff
		In-Depth Study	
X	X	Interviews with CFRP staff who work with study families	AAI site staff
X		Questionnaires about staff and family demographics	CFRP staff
X	X	Questionnaires about treatment for study families	CFRP staff
every three months		Records of CFRP treatment (services and activities) for study families	CFRP staff

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*Topics addressed in data collection instruments are described in greater detail in Appendix C.

results of this pilot study are presented in a Technical Progress Report, included as Appendix D. The development of all children in the sample was assessed using this measure in fall/winter 1979. The results will be the focus of the next CFRP evaluation report, to be submitted in May 1980.

The second pilot study was based on an in-home observation system which assesses parent-child interaction. This pilot study used an existing observation system developed and copyrighted by Dr. Jean Carew, president of Research for Children Inc. The system is closely related to a home observation system developed by Dr. Carew in conjunction with SRI International for use in ACYF's National Day Care Home Study. The observations focus on the child's normal interactions with his/her social and physical environment, with particular attention paid to the mother's interaction with the child. During this pilot study, two observation sessions were conducted in each of 32 family homes (16 CFRP and 16 control/comparison). These sessions were videotaped for later coding by Research for Children Inc. Results of the observation pilot study are presented in a Technical Progress Report, included as Appendix E. Based on pilot study findings, a decision will be made about the continued use of this observation system in the next phase of the CFRP evaluation. Such observations would be used to determine whether parent-child interaction changes over time as a result of family participation in CFRP.

In fall 1979, data collection was limited to the administration of the Bayley Scales of Infant Development at all sites and the ongoing collection of data on CFRP families about participation, referral, and goal attainment in CFRP. In addition, brief interviews were conducted with CFRP families that have dropped out, and also with staff, to determine why these families are no longer enrolled in the program and/or willing to participate in the

CFRP study. No site visits or other interviews were undertaken in the fall.

1.5 Analytic Strategies

Analytic strategies to be employed throughout the CFRP evaluation are eclectic, exploratory, and evolving over time. Only in the impact study (and perhaps in later stages of the in-depth study) will parametric, hypothesis-testing analytic strategies find useful application. Those applications will be conditioned heavily by the exploratory work conducted as an ongoing part of the evaluation.

The program study, which is largely qualitative, relies on open-ended interviews with CFRP staff, conducted during site visits; aggregation of staff background data and demographic data on all families enrolled in CFRP as of fall 1978; and narrative integration of these data across sites. The in-depth and impact studies are more heavily quantitative, but are set within the context of the program study. In order to characterize the CFRP and comparison group samples, descriptive techniques are used--tables with means and standard deviations or proportions, for instance, with an occasional box plot to highlight selected contrasts. The measures used for such descriptions are very straightforward; their purpose is to complement the program study by enabling informed readers to locate the CFRP evaluation sample relative to samples of families reported on in other child development and family intervention research.

Even within these basic descriptive analyses, parametric hypothesis tests are used as screening and descriptive tools. One-way analyses of variance by site, for instance, aided in the identification and selection of items which highlight the existing site-to-site differences.

A simple post hoc multiple comparison procedure was used to identify sites that appear to be particularly discrepant in these ANOVAs. Although ANOVA and multiple comparison procedures are inferential tools, they are used in this report to describe the dimensions on which expected site differences were actually observed.

For analytic purposes, data reduction strategies have been employed in the development of constructs on measures that represent the informational content of a specified set of data as efficiently as possible (i.e., in as few variables as possible). In keeping with the exploratory nature of the early analytic work, principal components analyses (or matrices of associational measures between specified items) form the basis of data reduction tasks; careful judgment and interpretation of sets of rotated components determined the choice of number and content of measures constructed for each variable domain. The constructs that were developed for the CFRP evaluation are described in Appendix F.

Measures constructed in data reduction analyses are then applied in three general analytic tasks. The first is to test for initial group differences (between CFRP and comparison families within sites, and between sites for program and staff measures). The second application, for family and possibly for staff measures, is in testing for program effects in the impact study. The third application is in the exploration (ultimately, the modeling) of family outcomes in the in-depth study.

The relational analyses in Chapter 4 are largely exploratory, and rely heavily upon the examination of bivariate relationships through scatterplots and cross-tabulations. Their immediate purpose is not to model outcomes, but rather to suggest potentially fruitful lines of analysis and data collection to be pursued in the ensuing years of the CFRP evaluation. A large part of the exploratory effort is devoted to issues in measuring change over time.

Finally, the impact analyses found in Chapter 4 are inferential statistical tests of six-month CFRP program effects. The inferences drawn rely heavily upon the randomized design employed in the impact study and, necessarily, the results of the attrition analyses reported in Appendices A and B.

Chapter 2

CHARACTERISTICS OF STUDY FAMILIES

Before examining the services that are provided by CFRP, it is important to describe the characteristics of families in the study. A profile of CFRP families is presented in this chapter. The characteristics of focal children are summarized, as are characteristics of the household--the mother's age, the type of family structure, and the composition of the household. Various indicators of socioeconomic status are presented for CFRP families pertaining to income, employment, and education. Certain aspects of families' housing situations are reviewed. Mother's feelings about anticipated changes in all these areas are explored, and families with different structures are compared in their other characteristics. Finally, differences in samples across sites are summarized. As was noted in Chapter 1, a total of 236 CFRP families, an average of 39 per site, participated in the evaluation in fall 1978, when baseline data were collected. The CFRP group was smallest in New Haven (36) and largest in Las Vegas (42).

Because our purpose is the description of CFRP families, the profiles presented here focus on the CFRP subgroup only--rather than describing the entire sample, which is composed of both CFRP families and control/comparison families. In most respects, the two groups of families are equivalent in their characteristics, as noted in Appendix A.* The description of the CFRP subgroup thus describes the entire sample. Our emphasis here on the CFRP family reflects a major objective of this evaluation--to describe services CFRP offers, their effectiveness, and the relationship between the program's impact and family characteristics or program processes. Only by comparing the two groups of families at each time point in the evaluation, however, will it be possible to fulfill another major objective--that is, to discern program impact, distinct from changes in family circumstances or behaviors that occur naturally.

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*The few differences that were detected between the two subgroups can be adjusted for in subsequent analyses; see Appendix A.

In presenting profiles of the CFRP families in the study, particular attention is paid to similarities and differences across the six impact study sites in the populations the programs serve. Across-site differences also are examined in Chapter 3, a profile of CFRP treatment. In the event that the populations served by the programs and the CFRP treatment are comparable across sites, it will be feasible to pool data from the six sites in analyses of program processes and impact. If the populations and treatment are different, however, within-site analyses are called for. This issue is addressed throughout this report.

2.1 Characteristics of CFRP Children

In this section we will briefly summarize the characteristics of children in the treatment group by age, birth order, sex, and ethnicity.

In September of 1978, when families in the treatment group entered CFRP, the average age of the 236 infants who are the focus of the study (hereafter referred to as focal children) was 4.1 months (S.D.=3.2). This mean was somewhat higher than the median (3.8) and modal (3.0) ages. The oldest child was one year old in September 1978; the youngest was not born until December 1978. Seven percent of the focal children were born after the family entered CFRP. Salem's focal children had the highest mean age (5.2 months), and those in St. Petersburg were youngest (3.1 months), but across-site differences were not found to be statistically significant.*

Over half of the focal children (55%) were firstborns. In Las Vegas, fully 95 percent of the focal children were firstborns, due to special efforts by the Las Vegas CFRP to recruit first-time mothers for the study; no such efforts were made in other sites. St. Petersburg had the smallest proportion of firstborn children (38%). Across-site differences in proportion of firstborn children are statistically significant ($p<.01$). Seven of the CFRP families (3%) had multiple births when the focal child was born. For purposes of the study, however, only one child per family was identified as the focal child.

There are slightly more female (52%) than male (48%) focal children. No statistically significant differences were detected across sites.

About one-third of the children are white and about two-thirds are non-white:** 47 percent are black, 8 percent Hispanic, and 9 percent of other non-white or mixed ethnic background (see Table 2-1).*** Four of the six impact study sites (Las Vegas, New Haven, Oklahoma City, and St. Petersburg) serve a predominantly minority population. Most CFRP families in Jackson and Salem, on the other hand, are white. A third of the families in New Haven are of

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*P values reported are simultaneous, joint, or multiple test values within clusters of variables; p values of 0.10 or less are considered to be statistically significant. The rationale for the multiple t-test approach is discussed in chapter note 1.

**Ethnicity of children is defined as the same as that of the mother.

***English is spoken in 93 percent of the CFRP homes, Spanish in 6 percent. A number of the families are bilingual.

Hispanic ethnic background. Hispanic families also are enrolled in Jackson, Las Vegas, and Salem, but comprise only small proportions of the study sample at these sites. Across-site differences in proportion of non-white children were statistically significant ($p<.01$).

Table 2-1

Ethnic Background of Focal Children by Site (percent)

	Jackson	Las Vegas	New Haven	Oklahoma City	St. Petersburg	Salem	Overall
	N=40	N=38	N=36	N=39	N=40	N=38	N=231
Black	27.5	47.4	47.2	74.4	85.0	---	47.2
White	65.0	21.1	16.7	7.7	12.5	89.5	35.5
Hispanic	2.5	7.9	33.3	---	---	7.9	8.2
Other	5.0	23.7	2.8	17.9	2.5	2.6	9.1

2.2 Household Characteristics

In this section we will briefly summarize the characteristics of CFRP households. We first discuss mother's age, then family structure (single-parent or two-parent status, marital status, and presence or absence of other adults, whether related or non-related), and finally, household composition (number of children and adults, ages of other children).

Mother's Age

The average age of mothers of focal children was 22.2 years (S.D.=5.4) at entry into the program in September 1978. Mean mother's age was higher than the median (20.9) and mode (18.6). The majority of the mothers in the CFRP group are under 25 years old. As noted in Table 2-2, there are a substantial proportion of teenage mothers in the sample: 41 percent are under 20, 22 percent under 18, 11 percent under 17, and 5 percent under 16. The youngest mother in the CFRP group is 12.5 years old, the oldest 42.1. Significant site differences were detected in mother's age (p=.03) and proportion of teenage mothers (p<.01). CFRP mothers in Las Vegas were youngest; their average age was 19.7 years (S.D.=4.62). Las Vegas also had the highest proportion of teenage mothers (59%). Mothers were oldest in New Haven, where their age averaged 24.7 years (S.D.=5.90).

Table 2-2

Distribution of Mother's Age by Site
(percent)

	Jackson	Las Vegas	New Haven	Oklahoma City	St. Petersburg	Salem	Overall
	N=40	N=42	N=36	N=39	N=40	N=39	N=236
Under 15	0	2	0	3	0	3	1
15-15.9	5	12	0	0	5	0	4
16-16.9	3	12	6	5	8	3	6
17-17.9	10	24	6	8	8	8	11
18-19.9	30	19	14	23	10	21	20
20-29.9	50	29	56	51	63	56	50
30-39.9	3	2	20	8	5	10	8
40 and over	0	0	0	3	3	0	1

Mother's age interacts with a number of other family characteristics. Younger mothers tend never to have married, have lower educational status (number of years of schooling completed), and are more likely to have only one child. Mother's age is also related to household composition and family structure. It does not, however, appear to be associated with such characteristics as per capita income, source of income, or whether the family rents or owns a home.

Family Structure

Table 2-3 presents information on the structure of the families in the CRFP group. In the group as a whole, 25 percent are two-parent families. St. Petersburg and Las Vegas had the lowest proportions of two-parent families (10% and 19% respectively); two-parent families were most common in Oklahoma City and Salem (39% at each site).

Table 2-3

Distribution of Family Types by Site*
(percent)

	N	Two Parents	Single Parents Living Alone	Single Parents with Extended Families	Single Parents with Other Unrelated Adults
Jackson	40	33	30	30	8
Las Vegas	42	19	10	64	7
New Haven	36	33	47	14	6
Oklahoma City	39	39	21	31	10
St. Petersburg	40	10	50	33	3
Salem	39	39	41	13	8
Total	236	25	33	33	10

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*Across-site differences were statistically significant in the proportion of single parents living with no other adults and single parents in extended families ($p<.01$).

Although 25 percent of the families are two-parent families, 30 percent of the mothers report that they are married or consider themselves to be informally married (i.e., with a male friend living in the household). An examination of household composition data shows that married status does not necessarily mean that two parents are present in the home. Likewise, mothers who are single parents may not be the only adult in their households--over half (55%) of single mothers live with other adults.

Mother's age appears to be related to the family structure in which she lives--in general, younger mothers are more likely to live in an extended family and less likely to live alone. For instance, Las Vegas, where the percentage of mothers under 20 is highest (69%), exhibits the highest percentage of single mothers living with the child's grandparents (64%) and the lowest percentage of single parents living alone (10%). Similarly, the proportion of mothers under 20 is lowest in New Haven (26%), and this site also has a very low proportion of mothers in extended family situations (14%).

Family structure is an important consideration, for parents may face different problems depending on the structure of the family. A single mother who lives with other adults may be more likely to seek employment, for example, because there is someone in the home who can care for the children while she is at work. On the other hand, extended family situations may pose problems of overcrowding or frustrations for the mother due to a lack of independence or not being perceived by her parents as an adult. CFRP staff may also work with each type of family in a different way. Mothers who are single and live alone, for example, may find it difficult to take an active part in program activities offered at the center because of babysitting problems. This may affect program processes and the ultimate effectiveness of the program in meeting family needs. These hypotheses were tested for this report, and will be repeatedly in subsequent phases of the study. Differences in family characteristics by type of family structure are presented later in this chapter.

Household Composition

Table 2-4 presents total household size of CFRP families, as well as the number of adults and children in the home. Total household size ranged from 2 to 12, number of adults from 1 to 7, and number of children from 1 to 8. In about one-third of the families (32%), the focal child lives alone with his or her parents. Twenty-three percent of the firstborn children have other children living in the home--twins or, in homes with young mothers, frequently aunts, uncles, or cousins of the child. In 5 percent of the families there are other children who live away from home; they were excluded in computing household size.

Table 2-4

Household Size
(N=236)

			Across-Site Differences	
	Mean	S.D.	F	p
Adults	2.11	1.09	5.77	<.05
Children	2.52	1.53	2.53	NS
Total	4.63	2.06	3.55	<.05

Statistically significant differences were detected across sites in household size and number of adults present in the home, as noted in Table 2-4. Las Vegas ranked highest in total household size compared to other sites, with a mean of 5.43 (S.D.=2.48). This is due to a disproportionately large number of mothers who live in extended family situations, as mentioned above, and a higher than average number of adults living in the home ($\bar{x}$=2.79; S.D.=1.20). Salem had the smallest households, with a mean of 3.74 (S.D.=1.43) and the fewest children per family ($\bar{x}$=1.92; S.D.=0.98). New Haven, on the other hand, had the fewest adults, averaging 1.67 (S.D.=0.72);

47 percent of the New Haven families are single parents living with no other adults, and relatively few (14%) live in extended family situations.

Table 2-5 shows the number of children per family in three age groups: infants and toddlers (under age three), three- to five-year-old preschoolers, and school-aged children (5 to 18).

Table 2-5
Number of Children per Family
by Age Group
(N=236)

	Mean	S.D.	Across-Site Differences F	Across-Site Differences p
Infants/ Toddlers (0-3.00)	1.36	0.55	1.50	NS
Preschoolers (3.1-5)	0.24	0.47	2.27	NS
School-age (5.1-18)	0.90	1.39	2.50	NS

All families in the study sample have at least one infant; 23 percent also have preschoolers between three and five years of age, and 38 percent have school-aged children. Only 10 percent of the families have children in all three age groups. No across-site differences were detected in mean number of children by age group.

2.3 Socioeconomic Status

In this section we consider various indicators of socioeconomic status--household income, per capita income, sources of income, employment status, and mother's educational attainment.

CFRP families reported a mean gross annual household income of $7,286 (S.D.=$4,583) to support a family averaging 4.6 members.* Household incomes varied from a low range of $3,000-$6,000 to a high of over $21,000. There were statistically significant differences on this variable across sites (p=.04). Las Vegas had by far the highest incomes, averaging $9,474 per year (S.D.=$6,553); families at this site also had the largest households, as was noted earlier.** Mean per capita income was $1,622 (S.D.=$737). The mode and median for per capita income were about the same as the mean. No significant differences were detected across sites. Information about income is summarized in Table 2-6.

Table 2-6
Annual Income
(N=196)*

			Across-Site Differences	
	Mean	S.D.	F	p
Household income	$7,286	$4,583	2.86	.04
Per capita income	$1,622	$ 737	.26	NS

Note: The incidence of missing data was high on income questions; 17% of the families did not respond.

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*Income figures in the text and in Table 2-6 may be somewhat misleading. They are calculated on the basis of the following income codes rather than actual income data: (1) $3-6,000; (2) $6,001-$9,000; (3) $9,001-$12,000; (4) $12,001-$15,000; (5) $15,001-$18,000; (6) $18,001-$21,000; (7) over $21,000.

**An attempt was made to obtain median household income data for the general population at the six sites. The most recent data available reflect 1974 figures and therefore cannot be used for comparative purposes.

The majority of families enrolled in CFRP receive income or financial support from more than one source. Seventy-five percent indicated that a part of their income is derived from wages; 73 percent receive support from welfare, AFDC, or other public assistance programs. Only a small percentage (12%) reported income from unemployment benefits. Other income sources were workmen's compensation, veteran's disability or pensions, and alimony or child support. Across-site differences were detected for wages, workmen's compensation, and veteran's benefits ($p <.01$), and for alimony and child support ($p=.05$).

Table 2-7 provides information about primary sources of income for CFRP households and differences across sites on this variable. Las Vegas had the smallest percentage (21%) of families who reported welfare as their primary source of income and the highest percentage (62%) of families with wages as their primary source of income. The small proportion of mothers who receive welfare support at that site is influenced by the fact that the mothers are younger and frequently live with their parents, who support the young family.

Table 2-7
Primary Sources of Income
(N=236)

		Across-Site Differences	
	Percent*	F	p
Wages, salaries, or other earned income	47	2.98	.07
Unemployment benefits	1	2.08	NS
Welfare, AFDC, or public assistance	40	2.71	NS
Workmen's compensation, veteran's disability, or pensions	2	0.20	NS
Alimony or child support	0	1.01	NS
Other	4	.18	NS

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*Figures do not sum to 100% because of missing data.

A total of 204 mothers (86%) responded to questions about their employment status. Slightly over one-fourth (27%) reported that they are working, for an average of 30.3 hours per week (S.D.=13.7); no statistically significant differences were found across sites. In 9.8 percent of the homes, the mother is the only wage earner in the family.

Another measure of socioeconomic status is mother's education. Slightly over half of the CFRP mothers (52%) had completed high school; 11 percent had gone beyond high school, although none had completed four years of college at entry into CFRP. Mothers averaged 2.7 (S.D.=1.0) on a scale of educational attainment 1 to 7.* Mother's education was approximately the same across sites; one would have expected significantly lower ratings of educational status in Las Vegas due to its high proportion of teenage mothers.

Eighteen percent of the mothers reported that they are currently going to school. Across-site differences were statistically significant (p=.01). Las Vegas had by far the highest percentage of mothers currently in school (43%). Most of the mothers in school were taking high school equivalency courses (68%); 16 percent were in college, 11 percent were taking adult education courses, and 5 percent were in technical school.

2.4 Housing

Seventy-three percent of the CFRP families rent, 10 percent own their homes, and 17 percent report that they have housing arrangements other than rental or ownership. One-fourth of the families live in housing subsidized by the government. Statistically significant differences across sites were detected both in percentage of families who rent ($p<.01$) and percentage using subsidized housing ($p<.01$). Compared with other sites, Salem ranked highest on rentals (97%); Oklahoma City ranked lowest, with only 5 percent of the families living in rental housing. Las Vegas, on the other hand, had the highest proportion of families who live in subsidized housing (55%). This is probably because the Las Vegas CFRP is located in the center of a large public housing project. Use of subsidized housing is lowest in New Haven (9%) and Jackson (8%).

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*Educational attainment was scaled as follows: (1) 8th grade or less; (2) 9-11th grade; (3) 12th grade; (4) GED; (5) some college (1-3 years); (6) college graduate (4 years); (7) graduate work.

CFRP mothers reported that they had lived at their present address 2.9 years on the average and had moved an average of 3.9 times in the past five years. Across-site differences were statistically significant ($p<.01$). Salem appears to be atypical compared with other sites--CFRP families in that site had lived at their present address less than one year ($\bar{x}=.64$) and moved the greatest number of times ($\bar{x}=8.34$).

2.5 Anticipated Changes in Family Circumstances

In the first parent interview, CFRP mothers were asked to think about the future and to describe what they expect to change in the next five-year period. Almost all mothers (95%) expected their circumstances to change. The majority of the families expected changes in their basic needs and family circumstances, as is illustrated in Table 2-8. Over half of the mothers foresaw changes in their marital status.

Statistically significant across-site differences were detected on number of expected changes ($p<.01$). Salem mothers ranked highest in number of anticipated changes (2.8) and St. Petersburg lowest, with an average of only 1.4 anticipated changes.

Table 2-8
Anticipated Family Changes
(N=236)

	Percent*
Basic needs	70
Marital status or family composition	58
Mother's education	47
Relocation/housing	40
Attitudes	5
Other	17

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*Figures do not sum to 100% because many mothers anticipated several changes in the next five years ($\bar{x}$=2.4, S.D.=1.2).

Mothers at different sites also expected different types of changes in the next five years. These across-site differences were statistically significant for changes in basic needs ($p<0.1$), family composition or marital status ($p<.01$), and relocation ($p<.01$). Changes in basic needs were mentioned by a higher proportion of mothers in Las Vegas (95%) than at other sites. This is probably related to the younger than average age of mothers at that site. Only 48 percent of St. Petersburg CFRP mothers, by contrast, anticipated changes in their basic needs. Changes in marital status or family composition were also mentioned most frequently in Las Vegas (88%) and Salem (79%) and least frequently in St. Petersburg (20%). St. Petersburg also ranked lowest on relocation changes, which were expected by only 13 percent of the mothers. Over half of the mothers in New Haven and Salem (61% and 59% respectively), on the other hand, expected to move in the next five years. Salem mothers, then, anticipate following the same pattern in terms of housing as occurred in the past five years, with frequent moves. Families in the CFRP and control/comparison group expected about the same number and types of changes in the next five years at all six sites.

2.6 Family Characteristics by Family Type

As was discussed in previous sections, four typical family structures are represented in the study:

- two-parent families;
- single parents living alone;
- single parents in extended family situations; and
- single parents living with unrelated adults.

Analyses were conducted to determine similarities and differences among these family types in the CFRP and control/comparison groups combined on the following characteristics (see Table 2-9):

- percent firstborn children;
- percent non-white children;
- mother's age;
- total household size;
- per capita income;
- sources of income--indicating family's relative dependence on welfare or earned income;
- mother's level of educational attainment;
- mother's employment status;
- residence in rental housing vs. other arrangements;
- residence in subsidized vs. non-subsidized housing;
- number of years at present address; and
- number of moves in the preceding five years.

Table 2-9
Family Characteristics by Family Type[a]
(CFRP and Control/Comparison Groups Combined)

	Two-Parent Families			Single Parents Living Alone			Single Parents in Extended Family Situations			Single Parents Living with Unrelated Adults					
	N	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	F	p^b	p^c
Focal child age	136	.36	.27	133	.35	.28	158	.29	.26	33	.28	.29	2.10	.10	NS
% firstborn	134	47	-	133	62	-	152	87	-	33	73	-	19.89	<.01	<.01
% non-white	136	41	-	133	30	-	158	85	-	33	64	-	42.98	<.01	<.01
Mother's age	136	23.72	5.07	132	23.64	4.62	158	18.81	2.85	33	21.42	5.20	42.62	<.01	<.01
Total household size	136	4.50	1.78	133	3.33	1.32	158	6.64	2.22	33	5.00	2.32	78.28	<.01	<.01
Per capita income[d]	119	1.75	.79	102	1.67	.61	108	1.54	.91	26	1.37	.52	2.55	.06	NS
Income Sources[e]	131	.64	.89	126	- .83	.75	151	.11	.77	29	-.04	.81	72.03	<.01	<.01
Welfare (%)	132	49	-	126	88	-	155	81	-	31	81	-	22.22	<.01	<.01
Wages (%)	134	91	-	126	46	-	154	82	-	31	81	-	31.14	<.01	<.01
Mother's education (% with H.S.)	135	60	-	130	59	-	157	40	-	32	44	-	5.45	<.01	.01
Mother's employment (%)	128	39	-	116	21	-	128	24	-	26	12	-	5.29	<.01	.01
Rental housing (%)	135	70	-	130	94	-	157	36	-	32	63	-	46.39	<.01	<.01
Subsidized housing (%)	134	17	-	129	26	-	149	31	-	31	16	-	2.90	.03	NS
Years at present address	136	1.40	1.92	132	1.10	1.45	158	6.81	6.06	33	1.24	2.11	72.58	<.01	<.01
# moves in last five years	135	4.47	3.98	127	5.17	7.05	156	2.26	4.79	30	3.97	3.59	8.05	<.01	<.01

[a] Data on changes are excluded here; they are addressed in greater detail in Chapter 4 in the context of discussions about capacity for independence and coping.

[b] Univariate p value.

[c] Multivariate p value.

[d] Per capita income figures are in thousands of dollars.

[e] Values given are for a variable construct which replaces individual items from the parent interview; constructs are described in greater detail in Appendix F.

Statistically significant differences were detected on almost all variables. Single parents in extended family situations, as would be expected, are the youngest, with a high proportion of the mothers under 18. This group has the highest proportion of firstborn children and is predominantly non-white. Since these mothers live in extended family situations, it is not surprising that they have lived at their present (parents') address the greatest number of years and moved the fewest times in the past five years. The characteristics of mothers in extended family situations are likely to change as they get older and establish independent households. In fact, their characteristics probably will closely resemble those of single parents living with no other adults in the home. Within the latter type of family structure, the households are smallest of any group, and income is more likely to come from welfare than from earned wages. Mothers tend to be older than those in extended family situations. Of the focal children in these households, fewer are firstborns. Single parents who live with no other adults have been at their present address the shortest time and have moved the greatest number of times. Mothers in two-parent families tend to be older than mothers in extended family situations and are more likely to have their income derived from wages rather than welfare or other sources.

Some of these differences in family characteristics may be related to differences in the populations served at the six CFRP sites (summarized in the next section). As noted earlier, family types are not distributed evenly across sites and also differ depending on mother's age. This relationship should be explored further in subsequent reports.

2.7 Summary of Differences Across Sites

Table 2-10 presents demographic and descriptive profiles of CFRP families in the evaluation and provides information about across-site differences. P-values for both univariate and multiple tests within the five variable clusters are presented in the table. The variable clusters are:

- child characteristics;
- household characteristics;
- socioeconomic status; and
- housing characteristics.

Among child characteristics, statistically significant differences were detected on two of four variables--the percentage of focal children who are firstborn and the ethnic background of children (% non-white). Of a total of 13 household composition and characteristic variables, 7 showed significant across-site differences: mother's age, proportion of teenage mothers (under 18 years of age), marital status, two family types (single parents living with no other adults and single parents living with the child's grandparents), total household size, and number of adults living in the household. Only two statistically significant across-site differences were detected on the six socioeconomic status variables--income derived from wages and welfare assistance. Statistically significant across-site differences were found on all four housing variables.

Comparisons of site profiles on demographic and descriptive family characteristics show Las Vegas and Salem

Table 2-10
Summary of Across-Site Differences

	N	Mean	S.D.	F	p^a	p^b
A. Child Characteristics						
Age (months)	236	4.10	3.22	1.90	.10	NS
% firstborn	236	55	-	9.51	<.01	<.01
Sex (% male)	236	48	-	1.89	.10	NS
% non-white	231	65	-	31.44	<.01	<.05
B. Household Composition and Characteristics						
Mother's age (years)	236	22.17	5.35	4.01	<.01	.03
% teenage mothers (under 18)	236	22	-	5.56	<.01	<.01
% married or informally married	236	30	-	3.42	<.01	.06
Family Types						
• % two parents (no other adults)	236	25	-	1.71	.13	NS
• % single parents (no other adults)	236	33	-	5.01	<.01	<.01
• % single parents with child's grandparents	236	32	-	7.36	<.01	<.01
• % single parents with unrelated adults	236	10	-	1.14	.34	NS
Total household size	236	4.63	2.06	3.55	<.01	.05
Total adults	236	2.11	1.09	5.77	<.01	.05
Total children	236	2.52	1.53	2.52	.03	NS
# infants (0-3)	236	1.36	.55	1.50	.19	NS
# preschoolers (3-5)	236	.24	.47	2.27	.05	NS
# school age (5-18)	236	.90	1.39	2.59	.03	NS
C. Socioeconomic Status						
Per capita income[c]	190	1.62	.74	.26	.93	NS
Income Sources[d]	223	-.06	1.00	2.94	.02	NS
Welfare (%)	229	73	-	3.52	<.01	.02
Wages (%)	229	75	-	3.59	<.01	.02
Mother's employment (%)	204	27	-	.67	.05	NS
Mother's education (% with H.S.)	234	49	-	.88	.50	NS
D. Housing Characteristics						
Housing rental (%)	234	73	-	5.45	<.01	<.01
Subsidized housing (%)	230	25	-	7.61	<.01	<.01
Years lived at present address	236	2.89	4.34	4.01	<.01	.01
# times moved in last five years	231	3.90	6.04	6.82	<.01	<.01

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[a] *p*-values are multiple tests by variable cluster.

[b] Multiple t-test *p*-values within each variable cluster.

[c] In thousands of dollars.

[d] Values are for variable construct; see Appendix F.

to serve atypical populations. Las Vegas has a higher proportion of firstborn focal children and younger mothers than other sites. In addition, a disproportionately high percentage of single mothers are under 18. A higher than average percentage live in extended family situations with the child's grandparents, and a smaller than average percentage have established independent households with no other adults present. Number of adults and total household size were greater in Las Vegas than at other sites, which is not surprising in view of the high proportion of mothers who live in extended family situations. In addition, subsidized housing was used by more families than at other sites.

In Salem the CFRP population is somewhat more comparable to that at other sites. In contrast to Las Vegas, only a small proportion of families live in extended family situations. Total household size was smaller than average at the Salem site. Differences were also detected on other family circumstance variables. A large percentage of the families use rental housing; in addition, they have lived at their present address the fewest years and have moved most frequently in the past five years.

Fewer differences were detected among the other sites. Jackson and St. Petersburg have a smaller than average proportion of families who use subsidized housing, and a smaller percentage of children were firstborns in St. Petersburg than at other sites. New Haven ranked lowest in use of subsidized housing, and few single parents lived in extended family situations compared to other sites. Rental housing was used by only a small proportion of families in Oklahoma City.

Differences reported above were found to be statistically significant in multiple comparison tests among the six CFRP sites.* This suggests that data from the six sites should not be pooled indiscriminately but analyzed separately for each site's program. Further, the feasibility of conducting across-site analyses depends on the extent to which covariable models, to be developed in the next phase of the CFRP evaluation, are found to be homogeneous. If they are heterogenous, it would be clearly inappropriate to pool data across sites.

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*See chapter note 2 for an explanation of methods used to compare site means.

Notes

1. When conducting multiple tests of one null hypothesis, there is a risk of overstating the confidence with which that null hypothesis is rejected. The simplest example is that of doing some number of independent tests (e.g., drawing new samples independently and repeating the test), each at a specified significance level, intending to reject the null hypothesis if any one test proves to be "significant." For 100 tests, each at the .05 level, one "expects" 5 rejections despite a "true" null hypothesis.

The problem with this approach is its failure to consider the essentially multivariate premise of the testing situation. In the absence of a truly multivariate test, the procedure outlined above has been addressed in the statistical literature as the "multiple comparison" problem. The appropriate strategy is to control the risk of wrongly rejecting the null hypothesis over all the individual, univariate tests jointly or simultaneously. A number of approaches to simultaneous testing have been developed; we are using a Bonferroni method for establishing a simultaneous ceiling (a^*) for any univariate significance level obtained (a) among k dependent tests:

$$a^* = 1 - (1 - a)^k$$

2. The simultaneous testing procedure described in note 1 has been used to determine that differences between sites do exist on specific variables (using one-way ANOVA). This procedure cannot, in and of itself, highlight extremes in site means that may have contributed to the (jointly) significant ANOVA. In order to justify the judgment of extreme values in particular sites on these variables, we employed a multiple comparison procedure: Contrasts between each site mean and the mean for all the other sites combined were tested. Six *post hoc* contrasts for each variable already judged to vary significantly by site are possible, and the risk of a Type I error was controlled over six tests simultaneously.

Chapter 3

PARTICIPATION IN THE CFRP

This chapter examines the program participation of the families in the impact study CFRP sample from fall 1978, when they entered the programs at the six sites, to spring 1979. Its purpose is to provide a descriptive review of: the assessment process as experienced by these families; perceived needs and expectations at the time of program entry; goals set and progress toward those goals; level of family participation in the program, including services provided and referrals made; individualization of program services; and satisfaction with the program. Chapter 4 will present a preliminary exploration of associations between some of these variables and family outcomes; this exploration will be pursued to greater depth in future reports on the CFRP evalution.

The first two sections of the present chapter provide a background for what follows. Section 3.1 is an overview of CFRP services at the six evaluation sites, based on the program study; it is, in fact, a summary of Chapter 6 of Volume II of this report. Section 3.2 presents a profile of the CFRP staff members assigned to work with the families in the impact study CFRP sample, as reflected in the same sorts of demographic, background, and status variables as those examined in Chapter 4 of Volume II for all CFRP staff members and family workers: ethnic distribution, age, marital status, and number of children; education and work experience; CFRP and Head Start experience and schedule of work in the program.

The third section of the chapter is devoted to needs assessment. It describes the intake and assessment process undergone by the CFRP sample families, including involvement of CFRP staff, involvement of other community agencies, and the role of parents. It also describes, on an aggregate level, the status and needs of these families at entry into the program as perceived by staff and by the parents themselves. Section 3.4 examines family expectations of the CFRP at time of entry, staff expectations of program benefits to the family, and congruence between the two. Section 3.5 details the family goals established by parents and family workers and reviews progress toward those goals.

The next section of the chapter (3.6) examines levels of program participation and services received. Based on staff and parent interviews and staff records, it includes: frequency and content of home visits; services provided and referrals made; and frequency of center sessions. Section 3.7 discusses individualization of services, including staff knowledge of family needs and means employed to match services and needs. Section 3.8 is concerned with satisfaction with the program and perceptions of program success, including families' view of the staff, families' view of the program, and the staff's view of families.

The final section (3.9) is essentially a summary review of the chapter. It examines possible implications of the findings discussed here for the effectiveness of the CFRP and the future of the evaluation.

3.1 CFRP Services

The program study of the CFRP evaluation has provided a comprehensive view of the services provided to families at the six impact study sites. This information is presented in considerable detail in Chapter 6 of Volume II of this report. It is summarized briefly in this section as a background for presentation of more specific information on the provision of services to the families assigned to the CFRP sample in the impact study.

Assessment and Enrollment

In general, the CFRP is not intended to be a drop-in program where families receive help only in crises, with no continuing involvement or commitment. Rather, it is intended that the relationship between the CFRP and the client family be a long-term one, with genuine commitment and involvement on both sides. Therefore, CFRP families go through a formal enrollment process.

To ensure that the services the family receives are individualized to the maximum extent possible, and that the specific needs of the family are met as effectively as possible, the enrollment process begins with needs assessment. This is conducted by a family advocate or home visitor who meets with the family one to several times, usually over a period of four to six weeks. Information on family needs is then passed on to an assessment team, which meets to establish family goals and to develop a family action plan.

Parents are expected to provide input during the goal-setting process, and the action plan must be approved by the parents before it can be implemented. Parents are also expected to indicate in some formal way their commitment to the program, often by signing an agreement. At this point, the family is considered enrolled and may begin to receive services. (As noted in Chapter 6 of Volume II, this description of the assessment process is of limited applicability to the New Haven program.)

CFRP Components

CFRP services are offered within the context of three major program components--infant-toddler, Head Start, and preschool-school linkage. Each is intended to serve families with children in a specific age group, and all three taken together are intended to provide continuity--especially developmental and educational continuity--across the period of a child's life from before birth to the primary grades in school.

The infant-toddler program serves children through age 2, and their families. It attempts to address the child directly by means of activities designed to provide stimulation and education. It also serves the child indirectly by means of activities addressed toward his/her parents and designed to improve their parenting skills and the quality of parent-child interaction. Infant-toddler center sessions and home visits are conducted with these two primary objectives in mind. To varying degrees, center sessions may be focused on parents alone, children alone, or children and parents together. Clearly at the majority of the six sites the bulk of the time is spent in separate sessions: some staff members work with the children in developmental and stimulative activities, while others conduct parent discussions on topics related to child development and parenting. By contrast, in home visits the focus is very much on the parent with the child. The child's development is assessed on a continuing basis, and the results are shared with the parents. Typically, much of the time during a home visit is spent in discussing and demonstrating activities the parent can engage in with the child, in observing the parent in such activities, and in eliciting a commitment from the parent to continue such activities in the absence of the CFRP staff member.

The Head Start component serves children age 3-5, and their families. Its primary focus is on preparation of the child for school, and thus it is largely directed toward the child. However, it also involves continuing efforts to engage the parent in active concern for the child's development and education. For this purpose, home visits are conducted by home visitors, family advocates, and/or Head Start teachers, and center sessions for parents are also held.

The preschool-school linkage component serves children age 5-8, and their families. Its purpose is to ease the transition from Head Start to public school. This component is the least well-defined of the three and, not surprisingly, it varies the most across the six sites. One reason for this appears to be a lack of clarity as to who its clients are--whether, and to what degree, it is supposed to serve children, their parents, or the schools. In practice, across the six sites to varying degrees the PSL component may serve any one or two of these, or all three. It may include orientation of children, their parents, and school personnel; liaison between parents and schools; troubleshooting in response to requests from parents or school personnel; and tutoring of children. In Jackson, where PSL families are visited regularly, home visits serve as an opportunity for discussion of school-related concerns. In other programs PSL families are less likely to be visited unless they also have younger children.

Individualization of Services

Regardless of the age group into which children fall (as long as they are between ages 0 and 8) and the particular program component in which they are involved, the CFRP is intended to serve their families as well. Thus, assessment and goal-setting are necessarily an ongoing process, and not merely an introduction to the program. As already indicated, children's development is regularly assessed in most programs. In addition, reassessment of family needs is carried out periodically, to evaluate the family's progress as well as the effectiveness of the program in meeting their needs. New goals may be set, and new action plans developed.

Of course, home visitors and family advocates do more than set goals and make plans. They also provide substantial services, beyond the specifically child-oriented services discussed above in connection with the three major program components. They do whatever is necessary to ensure that the family's needs are met and their goals achieved, whether they are for improved housing, employment, health care, or in some other area. The area of health care is the most clearly defined and fully developed aspect of service provision across programs generally (except, of course, for educational and developmental services); this is discussed in further detail in Chapter 6 of Volume II.

In addition to providing services directly, the CFRP serves as a point of contact between client families and needed community resources and agencies. A primary means of providing access to these resources and agencies is referral. Although the six CFRPs vary in the degree to which they emphasize referrals as opposed to direct services, all in fact make frequent referrals, following up to make sure the needed service is received, and in many cases accompanying the client to the appropriate agency or at least arranging for transportation. Responsibility for referrals is handled, directly or indirectly, by the family advocate or home visitor.

Parent Participation

In order for the CFRP to work most effectively, families cannot be passive recipients of its services. On the contrary, as noted earlier, families are expected to make a genuine commitment to active participation. A view of the parent as the primary educator of the child is inherent in the CFRP philosophy and mandate. If the parent's performance in this role is to be enhanced, the parent must engage actively in CFRP activities. If she is unwilling to do so, this may be grounds for termination, for removal of the family from CFRP enrollment.

Several mechanisms have been set up to encourage parent involvement. At each site, there is a policy council made up largely of parents; this council has considerable authority over program operations, although its members may choose not to exercise it. In several programs there are opportunities for parents to work either as volunteers or as paid employees. Further, all of the programs offer activities designed especially for parents. In spite of these mechanisms, however, all six CFRPs have experienced difficulty in maintaining parent participation at optimum levels. Some of the programs have experimented with tangible incentives as a means of encouraging participation. At all six sites opportunities are offered for providing feedback on program activities, in an effort to ascertain parents' interests and to be responsive to their perceived needs.

3.2 CFRP Staff Profile

Summary statistics on a broad spectrum of variables are presented in Chapter 4 of Volume II of this report for CFRP staff members at the six impact study sites. Data on a number of these same variables are presented in this section for the 37 family workers--home visitors and family advocates--

assigned to the families in the impact study CFRP sample. The breakdown by sites is as follows:

Jackson	13
Las Vegas	5
New Haven	6
Oklahoma City	5
St. Petersburg	5
Salem	3
Total	37

The reason for the comparatively large N in Jackson is partly that in the Family Development Program there two family workers--a family life educator and a home parent teacher--are assigned to each family.

Demographics

Ethnicity--There are about equal numbers of black and white family workers serving the CFRP sample, along with two Hispanic (Table 3-1). These proportions are roughly comparable to those for all CFRP staff. However, it is of equal interest to compare ethnic distribution among these family workers with the distribution among the families they serve (Table 2-1, p. 2-4). The match is fairly good, both within sites and overall. At four of the six sites the majority of these workers--and of the sample families--are non-white. The exceptions are Salem and Jackson.

Table 3-1

CFRP Sample Family Workers:
Ethnic Distribution (percent)

	Jackson	Las Vegas	New Haven	Oklahoma City	St. Peters-Burg	Salem	Over-all
	N=13	N=5	N=6	N=5	N=5	N=3	N=37
Black	23	60	67	100	60	0	49
White	77	20	17	0	40	100	46
Hispanic	0	20	17	0	0	0	5

Age--The CFRP sample family workers (N=36, since one did not respond to this question) are 33.3 years old on the average (SD=9.4), slightly younger than family workers in general (who average 35.0). However, the range is 21.3 to 53.6, with both extremes accounted for by Jackson. The mean was highest in Salem (37.2) and lowest in Las Vegas (31.3). Thus, in general, these family workers are serving mothers who are younger than themselves ($\bar{x}$=22.2)--although there again the range is wide (12.5 to 42.1). The lowest mean for mother's age (19.7), as for family worker's age, was in Las Vegas.

Marital status--About 43 percent of the CFRP sample family workers are married, 22 percent formerly married (separated or divorced), and 35 percent never married. These proportions correspond fairly closely to those for all CFRP family workers. There is considerable variation across sites (for example, 80 percent never married in Oklahoma City and 100 percent married in Salem).

Children--Some 62 percent of the CFRP sample family workers have children of their own, and about half have children living at home. (Among all CFRP family workers, three-fourths have children and 57 percent have children at home.) There is wide variation across sites. In New Haven and St. Petersburg all have children, and in Las Vegas and Oklahoma City the majority do not; further, in New Haven all have children at home, while in Las Vegas and Oklahoma City only 20 percent do. The number of children at home ranges from one to five, with two or three modal. About a third of the CFRP sample family workers have had the experience of being Head Start parents (the same proportion as for CFRP staff members and family workers overall). Again, this varies across sites, from a high of 83 percent in New Haven to none in Salem.

Preparation

Education--CFRP sample family workers have had 14.8 years of formal education on the average (SD=1.9), with a low mean of 13.0 in New Haven and a high of 16.0 in Salem. (These figures correspond closely to those for CFRP family workers in general.) Roughly 38 percent have associate's degrees, 46 percent have bachelor's degrees, and one (in Salem) has a master's degree. The most popular degree fields are social work and sociology (39 percent), education (14 percent), and mental health and psychology (11 percent).

About 43 percent of these workers have had education or training that was not degree-related, with New Haven staff least likely to have had such training. Four content categories account for three-fourths of the training taken: social work and sociology, child development, mental health and psychology, and medical. In addition to formal education and non-degree programs, 76 percent of these workers have attended workshops and/or short courses, mostly in social work and sociology, child development, or mental health and psychology. Almost all have also received training from the CFRP itself, including program-sponsored workshops and short courses as well as pre-service training. Only one of these workers, in Jackson, has a Child Development Associates (CDA) certificate; none is working toward CDA certification.

One-fourth of the CFRP sample family workers are now in school. Most of these are pursuing bachelor's or graduate degrees. By far the most popular content field is social work and sociology.

Work experience--About 46 percent of these family workers (compared with 52 percent of all CFRP family workers) have had paid work experience that relates in some way to CFRP work. This includes administrative, supervisory, and specialist experience, as well as experience in teaching or working with families. None of the CFRP sample family workers in St. Petersburg reported having had such experience. The number of years of such experience ranges across sites from 1 to 5. About half of these workers have also had experience working as volunteers for a variety of public and private institutions and agencies.

Status

CFRP and Head Start experience--The CFRP sample family workers have had 1.9 years of experience on the average (SD=2.1) working in the program (N=35 on this item). This corresponds closely to the mean for all family workers. Mean years of CFRP experience is much higher in St. Petersburg, New Haven, and Salem ($\bar{x}=3.25$ for the three sites combined) than in Oklahoma City, Las Vegas, and Jackson ($\bar{x}=0.98$ for the three sites combined). The St. Petersburg mean was highest (3.4) and the Oklahoma City mean lowest (0.6). (Note that the site means for the CFRP sample family workers do not correspond to those for all CFRP family workers.)

Mean years of experience in Head Start (N=26) is higher than in CFRP--as would be expected, given the longer life of this program to date. (The exception is Las Vegas, with a mean of 0.7 years in Head Start, compared with 1.1 in CFRP.) The overall mean is 4.8 (SD=4.5); this corresponds to 5.0 for all family workers. Except for Las Vegas, there is comparatively little variation across sites; means range from 5.0 (in Salem) to 5.8 (in New Haven). (Again, site means do not correspond to those for all family workers.)

Work schedule--For almost all of the CFRP sample family workers, their work in the program is a full-time job. The overall mean for hours per week scheduled (N=36 on this item) is 38.4 (SD=3.6); this compares with a mean for all CFRP family workers of 35.3. In Las Vegas, Oklahoma City, St. Petersburg, and Salem, all are scheduled to work 40 hours a week. In Jackson, five reported 32 hours, one 35 hours, and seven 40 hours. (Reports from site visits indicate that home parent teachers in Jackson are scheduled for 32 hours a week, while family life educators work 40 hours.) In New Haven, four reported 35 hours, one 37 hours, and one 50 hours. Only three indicated they have another job outside the CFRP (one in Jackson and two in Las Vegas.)

For most (84 percent) of the CFRP sample family workers, their work in the program is a year-round job; this is also the case for 78 percent of all CFRP family workers. Four (three in New Haven and one in Salem) indicated that they work during the school year only. Two (both in Jackson) indicated that they work some other portion of the year.

Summary

The home visitors and family advocates assigned to work with the CFRP group of families in the impact study, then, are about equally divided between white and non-white. Most are in their twenties, thirties, and forties, with a mean age of 33. They are somewhat more likely to be married than to have never been married, with about one-fourth formerly married. About 60 percent have children, about one-half have children at home, and about one-third have had children in Head Start.

Most of these workers have finished high school and gone on to college, and about half have finished college. A large proportion have had other education or training that was not degree-related but was related, at least indirectly, to their work in the CFRP. Almost half have also had prior related work experience, on a paid and/or volunteer basis.

The period of experience these workers have had in the CFRP ranges widely, with an average of about two years. Their mean experience in Head Start is almost five years. Almost all work full time in the CFRP, and most work year-round.

3.3 Assessment of Family Needs

At all of the CFRPs, a substantial amount of time and effort is invested in the process of ascertaining the specific needs of specific families, in an effort to match program activities and services to those needs as effectively as possible. This section includes a discussion of that process as it involved the impact study CFRP families and the staff members assigned to work with them, as well as an aggregate summary of the status and needs of these families at the time of their entry into the programs.

The Assessment Process

In fall 1978, at the time the FRI 1* was administered, the CFR program was just beginning for the families in the impact study sample. The majority (78%) entered the program the same month as the interview or the previous month. The starting dates for families imply that Jackson, Las Vegas, and St. Petersburg had been in full operation at least two months before the FRI 1 and Oklahoma City and Salem about a month, and that New Haven had not yet recruited and visited many families ($p<.01$). As shown in Table 3-2, assessments had been completed in Jackson and St. Petersburg for most families, but were infrequent at other sites ($p<.01$); action plans had been completed mostly in Jackson ($p<.01$).

Table 3-2 Assessment Status (percent)

	Jackson	Las Vegas	New Haven	Oklahoma City	St. Petersburg	Salem	Overall
Assessment completed	N=38	N=29	N=2	N=27	N=34	N=39	N=169
	92	17	0	0	85	0	41
Action plan completed	N=36	N=29	N=1	N=26	N=33	N=21	N=146
	92	17	0	0	12	0	32

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*Family Review Interview 1 was administered to the family workers assigned to the families in the impact study CFRP sample (N of families=189).

elsewhere ($p<.01$); the health specialist was present 38 percent of the time, also more often in Salem and St. Petersburg ($p<.01$). A Head Start staff member was present at 36 percent of the meetings, always in Salem and often in St. Petersburg ($p<.01$); and an education specialist was invited 27 percent of the time, more often in Las Vegas and Oklahoma City ($p<.01$). In general, more staff are involved in Salem and St Petersburg than at other sites. In terms of other agencies' involvement in the assessment process, the overall frequency is about 37 percent. It is the norm in St. Petersburg for some representative to be present, and this is the case about half the time in Oklahoma City ($p<.01$).

In developing the family action plan, 94 percent of the time the respondent to the BQ was involved, and 88 percent of the time the parent was. Another home visitor or family advocate was involved 27 percent of the time, more often in Salem than at other sites ($p<.01$), and other CFRP staff were involved 42 percent of the time, more often in Las Vegas and Salem ($p<.01$). Parents participated at almost every step: reviewing suggestions from the assessment meeting (70%); reviewing family goals, needs and concerns (90%); deciding which goals to work on first (88%); deciding on steps to the goals (79%); and reviewing plans for specific actions by the staff and the family (74%). Staff alone more frequently decided on staff actions to help the family attain goals (53%). When the action plan was completed, staff generally talked it over with the parent (98% of the time); 84 percent of the time they asked for approval (less often in Jackson, $p<.01$); in 75 percent of the cases staff asked for a signature (never in Jackson, $p<.01$).

Staff reported that goals were easily identified by parents in 30 percent of the cases, and in another 46 percent the parents had some ideas for goals, but needed help (Table 3-3). Sites differed on this measure, with Las Vegas and Oklahoma City staff claiming it was easier for their parents (p<.01). For 35 percent of the families, the goals were described as reflecting very well what the respondent expects to accomplish with the family, and for another 52 percent the goals reflected expectations moderately well. Staff in Las Vegas were more likely to say "very well" than at other sites (p<.01).

Table 3-3 Parent Ease in Identifying Goals (percent)

	Jackson N=34	Las Vegas N=34	New Haven N=14	Oklahoma City N=23	St. Petersburg N=34	Salem N=33	Overall N=172
Goals easily identified	21	50	21	44	24	18	30
Had ideas, needed help	47	47	79	26	46	44	46
Had no ideas	15	3	0	17	21	24	15
Goal-setting difficult	18	0	0	13	9	15	10

In 46 percent of the cases, another staff member (than the respondent) has done a separate assessment of the family, more often in Jackson and Salem than at other sites (p<.01). In 56 percent of these cases this person was a specialist. The purpose of the separate assessment was usually to plan activities (49%) or set goals (36%).

There is a regular reassessment schedule for 85 percent of the families. In 51 percent of the cases reassessment occurs every six months, and in 25 percent once a year. It occurs more frequently in Jackson, Las Vegas, and Oklahoma City, and less frequently in Salem and St. Petersburg (p<.01). For 93 percent of the families reassessment will involve a formal meeting; action plans will be rewritten (99%) and newly signed by the parent (85%; note that Jackson does not require signatures).

It should be noted that the assessment process outlined here and the participants in it correspond very closely to the more general description in the program study report (Volume II, Chapter 6). It is clear, among other things, that parents do play a major role in the process, as they are supposed to, and that this role is somewhat greater in Las Vegas and Salem--where, for example, parent attendance is required at the assessment meeting--than at other sites. Further, it is clear that the process is less well-defined in New Haven than elsewhere, both initially and in reassessment.

Family Status and Needs

As has been indicated, in fall 1978, when the FRI 1 was administered, the assessment process was still going on for many of the CFRP families. Therefore, on a number of items in this instrument, the proportion of "Don't Know" responses was substantial. (The issue of staff knowledge of family and child characteristics and circumstances is disussed below, in Section 3.7.) Nevertheless, enough items were answered for enough families so that it is possible to develop a general picture of staff perceptions of family status and needs as of that time.

On a number of dimensions, these families were seen as relatively strong. Family workers gave particularly positive reports on the status of the focal infant and on mother-child relationship. They indicated that 80 percent of the infants were the right weight, 59 percent were hungry at predictable intervals, and 64 percent had regular sleeping patterns. Further, they reported that 79 percent of the mothers felt very comfortable or comfortable with the baby's eating schedule, 70 percent felt somewhat or very positive about the baby's sleeping schedule, and 82 percent felt somewhat or very positive about the baby's disposition.

The family workers did identify some problems, however, as shown in Table 3-4; the numbers refer to the percentage of families who were viewed as having at least one problem in a given area. The mean number of areas per family in which one or more problems were listed was 2.82 (SD=1.46). Employment problems were most common, with high frequencies at several sites (but site differences significant at $p<.01$). Family problems were also frequently cited, with Salem and Jackson particularly high on this category ($p<.01$); included in this area were such problems as permanent or temporary absence of a family member, serious discord in the home, lack of child-rearing experience, and heavy, continuous child care responsibility. Housing problems were next most common, particularly in Oklahoma City ($p<.01$), followed by economic problems, which were fairly evenly distributed across sites. "Isolation" refers to a lack of contact with the extended family and the community; site differences here were not significant. Health problems were most frequently cited in Salem ($p<.05$).

Table 3-4 Percent of Families with Problems in Given Areas

	Jackson	Las Vegas	New Haven	Oklahoma City	St. Petersburg	Salem	Overall
Health	8	15	0	13	15	35	16
Economic	49	44	55	50	45	53	49
Employment	71	79	77	91	59	39	66
Housing	72	60	57	86	29	50	58
Family	79	66	14	56	38	82	60
Isolation	40	14	25	32	24	33	29

Note: Site Ns and overall Ns vary by category.

When asked about one area in which they were particularly concerned for each family, staff mentioned financial stability (16%), unemployment (12%), and housing and management of child care (11% each). They reported that families had discussed similar problems in early meetings: child care (30%), employment (26%), housing (23%), and health care (23%). The problems and needs faced by these families appear to be very practical ones, most of them not related directly to child development.

3.4 Expectations of CFRP

It appears likely that the expectations held by a parent at the time of enrollment in the CFRP will have an effect on the family's participation in program activities, on services received, and on outcomes for the family. Staff expectations of family participation and success should also have an impact. The issue of congruence between family expectations and staff expectations is a third predictor variable in this domain. All three are discussed in this section, for the families in the impact study CFRP sample and for the staff members assigned to work with them.

Family Expectations

The PI 2*, like the FRI 1, was administered in fall 1978, at a time when the CFRP sample families were coming into the six programs. (So few families had been enrolled in New Haven that only 5 were given the instrument.) Parents were asked about their expectations of the CFRP. As shown in Table 3-5, the most frequent responses included provision of day care; someone to talk to about family concerns; and, especially in Jackson ($p<.01$), opportunity to learn about child discipline. This list, which is largely child-oriented, may be compared with the list of parent concerns listed by staff in the FRI 1. Staff indicated that parents were primarily interested in assistance in the following areas: child development (21%), education (19%), housing (16%), learning about child discipline (15%), day care (14%), and employment (13%). While the latter list does include child development and learning about child discipline, it also includes such areas of practical assistance as education, housing, and employment.

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*Parent Interview 2 was administered to the parents of families in the impact study CFRP sample (N=168).

Table 3-5 Parent Expectations of CFRP (percent)

	Jackson	Las Vegas	New Haven*	Oklahoma City	St. Petersburg	Salem	Overall
	N=33	N=34		N=24	N=34	N=36	N=161
Getting day care	9	32		13	29	28	23
Talking about family concerns	21	9		17	24	14	17
Learning about child discipline	42	9		4	15	8	16
Learning children's games	21	18		13	9	3	12
Meeting other people	18	9		0	9	22	12
Checking baby's growth	15	21		17	3	6	12
Child playing with others	21	6		0	6	19	11
Attending meetings/ Going on trips	6	6		4	9	22	11

*Only 5 families in New Haven were interviewed using the PI 2.

Parents were also asked how long they expected the family to stay in the program and why they might leave. At the time of the PI 2, the modal response (30%) was 5 years, with a range of 0 to 10 (note that only 32% of the parents answered this question). Parents thought they would leave when the child is no longer eligible (34%), when they move out of the area (17%), if they are dissatisfied (13%), or if there is no more need for them to be in the program (11%). Responses to the PI 3*, administered in spring 1979 (response rate=25%), were very similar: the modal expected stay in the program was 5 or 8 years, with a range of 1 month to 10 years. Parents saw three primary reasons for leaving: the child is too old (31%); the family is moving (21%); or there is no more need for the program (13%).

Staff Expectations

On the FRI 1, the CFRP sample family workers were asked what benefits they emphasized in talking about the program with each new family. Their responses are shown in Table 3-6. Clearly, their emphasis was first child-oriented and second social. Direct services such as health care and day care appear lower in the list. (It should be noted that staff members were asked each of these items individually, and that such benefits as assistance in obtaining employment or housing were not mentioned.)

Family workers were not asked about their expectations of how long families would stay in the CFRP, but they were asked for prognoses for success (FRI 1). In general, the responses were very positive. They indicated that 92 percent of the families have a support system around them; that 78 percent of the extended families are supportive of CFRP; that the program will solve some or a few of the

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*Parent Interview 3 was administered to the parents of families in the impact study CFRP sample (N=188) and in the control/comparison group (N=198).

Table 3-6 CFRP Benefits Mentioned by Staff (percent)

	Jackson N=29	Las Vegas N=29	New Haven N=12	Okla-homa City N=26	St. Peters-burg N=30	Salem N=39	Over-all N=165
Learning about child development	100	93	67	96	97	97	95
Talking about family concerns	72	93	58	92	87	100	87
Meeting other people	69	93	58	96	83	95	86
Learning children's games	59	97	67	89	100	80	83
Attending meetings/ Going on trips	46	90	67	96	83	95	82
Learning about child discipline	86	86	50	50	93	87	79
Learning about health	52	86	58	81	93	90	79
Learning about nutrition	59	90	58	81	93	82	79
Receiving health care	31	93	42	96	70	92	75
Child playing with others	55	83	67	77	63	74	70
Checking baby's growth	24	86	42	85	53	100	69
Learning crafts/skills	48	83	67	85	73	59	69
Learning home management	62	86	42	69	60	33	59
Getting family involved with child	21	86	50	46	57	28	47
Getting day care	10	52	8	19	43	56	36

problems of 78 percent of the families; and that families will get social benefits (41%) and support (32%) from the program. The latter two ideas are closely related to the benefits stressed by staff in discussing the program with the families. Las Vegas staff more frequently said the CFRP would solve all or most of a family's problems (however, Las Vegas staff tended to be highly positive on a large portion of items, suggesting the possibility of some bias); Salem staff more often felt the program would solve none or few of many families' problems ($p<.01$). Social benefits were more often checked in Jackson and Oklahoma City ($p<.01$) and support with problems in Salem ($p<.01$). When asked about the kinds of problems the CFRP would help to solve, family workers indicated that they expected changes in employment status, housing, management of child care, and financial stability.

Family/Staff Congruence

On balance, the content of family and staff expectations for the benefits to be derived from participation in the CFRP are not widely discrepant. More specifically, Tables 3-5 and 3-6 match reasonably well. However, the fact that provision of day care heads the list of parent responses and is last on the list of staff responses suggests that there may well be a discrepancy in the nature of the assistance sought on the one hand and offered on the other. That is, it appears that parents may be looking for practical assistance (such as the provision of day care), while the program is offering counsel (as in opportunities to learn about child development). As time passes, this discrepancy may result in increased disaffection as parents' expectations fail to be fulfilled by the CFRPs. (Current information on families' satisfaction with the program is discussed below, in Section 3.8.) On the other hand, as noted, staff also indicated their expectation that the CFRP would be effective in helping to meet families' needs in such practical areas as employment, housing, and child care management.

If a favorable attitude toward the program on the part of extended family and friends is predictive of success, the CFRP sample family workers may have good reason for their positive prognoses. At the time of the PI 2, 60 percent of the parents said their family was greatly favorable or favorable toward the program, while 37 percent did not know their family's attitude; 54 percent said their friends were greatly favorable or favorable, while 44 percent did not know. Few at any site reported any known problems in the attitudes of their families or friends toward the CFRP.

3.5 Goals

A part of the development of the family action plan is the setting of goals for the family. However, goal-setting is also a continuing activity. The initial set of goals is supplemented by additional goals as the program year progresses and as new needs are identified. This section summarizes the frequency and kinds of goals set for the families in the CFRP sample during their early months in the program (as recorded on FPR* forms).

For Quarter 2, staff reported an average of 4.90 goals per family, but there were considerable site differences (Table 3-7). Families from Salem were described as having more goals than families from other sites, whereas families from New Haven had fewer goals ($p<.01$). The mean number of goals listed in Quarter 3 was 3.37, somewhat below the number in Quarter 2. Once again, families in Salem were described as having more goals than families at other sites ($p<.01$). Since staff were asked to continue from quarter to quarter reporting all goals that had been set for each family, the decrease from Quarter 2 to Quarter 3 is somewhat problematic: an *increase* in the number of goals between the two quarters would have been anticipated, because of the additional time to set goals.

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*Family Participation Record is filled out quarterly by staff members. The results presented here include all goals set by the end of Quarter 2 (January-March 1979, N of families=186) and all goals set by the end of Quarter 3 (April-June 1979, N of families=140). No Quarter 3 data were available from St. Petersburg.

Table 3-7 Mean Number of Goals per Family

	Jackson	Las Vegas	New Haven	Oklahoma City	St. Peters-Burg	Salem	Overall
Q2	N=35	N=37	N=12	N=26	N=36	N=40	N=186
	3.94	5.65	0.58	3.31	5.03	7.25	4.90
(SD)	(2.20)	(3.49)	(1.38)	(3.61)	(3.08)	(2.73)	(3.40)
Q3	N=35	N=36	N=13	N=21	--	N=35	N=140
	3.60	2.92	1.62	2.00	--	5.09	3.37
(SD)	(2.14)	(2.39)	(1.12)	(1.34)	--	(1.92)	(2.28)

Most of the goals identified for families correspond to the problems that family workers and parents had defined. Table 3-8 summarizes the data on types of goals set by families during Quarters 1 through 3. The numbers in the table refer to the percentage of families who stated at least one goal of a given type. The most frequent goal category is health, followed by education, housing, employment, and parenting skills. The practical goals set by so many families mirror the problems that family workers and parents had identified.

Table 3-8 Percent of Families with Each Goal Type

	Jackson	Las Vegas	New Haven	Oklahoma City	St. Petersburg	Salem	Overall
	N=36	N=38	N=21	N=29	N=36	N=40	N=200
Developmental	11	21	0	14	42	10	18
Parenting	64	3	0	35	44	63	38
Health	42	71	5	38	31	85	50
Economic	19	26	5	21	0	10	14
Employment	25	50	14	41	56	30	38
Job training	25	32	14	10	25	18	22
Housing	53	55	24	45	28	23	39
Education	42	76	29	21	36	33	41
Personal/ interpersonal	56	3	10	3	14	78	30
Program participation	22	0	52	17	14	28	20

The information in Table 3-8 also allows an analysis of site differences. First, sites do differ in the percentage of families who set goals in eight of the ten goal categories. More goals dealing with child development were set in St. Petersburg than at other sites ($p<.01$); more goals relating to parenting skills were set in Jackson and Salem than at other sites ($p<.01$); more health-related goals were set in Salem and Las Vegas ($p<.01$); more employment goals were set in Las Vegas and St. Petersburg ($p<.10$); more housing goals were set in Jackson and Las Vegas ($p<.10$); more education goals were set in Las Vegas ($p<.01$); more goals which involve improving personal and interpersonal skills were set in Salem and Jackson ($p<.01$); and more goals for increased program participation were set in New Haven ($p<.01$).

In looking down the columns in Table 3-8, it appears that the predominance of certain goal types at given sites reflects differences in site characteristics, at least to some degree. For example, the comparatively large proportion of housing goals in Jackson (53%) reflects the difficulty of finding adequate housing in the Jackson area, a problem remarked upon by CFRP staff at that site (and reported in Chapter 6 of Volume II). In Las Vegas, the most frequent goal category is education (76%); this appears reasonable, given the young age of so many of the mothers in the CFRP sample in Las Vegas. The preponderance of goals for increased program participation (52%) in New Haven fits with the fact that that program was slow to get started with a large number of families, so that bringing families into the program network was of primary importance.

On the other hand, a large proportion of goals of a given type at a given site may also reflect program emphasis. For example, in Salem there were frequent health-related goals (85%); as described in Chapter 6 of Volume II, the health component of the Salem program is particularly strong. The program's health coordinator is an RN who visits each new CFRP family to perform a health assessment and typically sits in on the assessment meeting; she sees infants at regular intervals and provides training in preventive care to staff and families. It is hardly surprising, given this emphasis, to note a large number of health-related goals at this site. Also in Salem, as well as in Jackson, there were frequent goals in the areas of increasing personal and interpersonal skills and parenting skills. These categories include such goals as becoming more assertive, reducing family stress, learning ways to handle anger, increasing social interaction with adults, and improving single parenting skills; again, this appears to reflect a program emphasis at these two sites.

Additional information of interest is the family member(s) for whom the goal was set. The vast majority of families set goals for the parent (Table 3-9). About 34 percent of the families set at least one goal concerning both the parent and a child; 23 percent set goals for the focal child alone; and 17 percent set one or more goals for another child in the family. The number of families with goals for the parent would seem to be reasonable, since the focal children are still infants and since the families have a large number of practical needs which can only be met by the parent acting to improve skills needed for the job market, to find better housing, etc. However, this also reflects the fact that CFRP is a family-oriented program, not focused on the child alone.

Table 3-9 Percent of Families with Goals for Given Family Members

	Jackson N=36	Las Vegas N=38	New Haven N=21	Oklahoma City N=29	St. Peters-Burg N=36	Salem N=40	Overall N=200
Parent	97	92	91	76	86	93	90
Focal child	11	55	5	4	25	25	23
Other child	14	3	0	28	31	23	17
Parent and child	33	40	0	24	40	48	34

Goals may be classified further as one-time or ongoing. One-time goals refer to things that could be accomplished by one visit to an agency or to a doctor, etc.; ongoing goals refer to changes over time, such as a change in parent-child interactions. The great majority of families had goals in both categories. The exceptions were New Haven, where only 38 percent had one-time goals ($p<.01$), and Oklahoma City and Las Vegas, where only about half had ongoing goals ($p<.01$).

Table 3-10 displays data on the status of goals that have been set--the degree to which families have completed goals, made some progress, or dropped them. About 48 percent of families have completed one or more goals, 41 percent of families have made some progress on at least one goal, and 21 percent have dropped one or more of their goals. In order to examine progress toward goals in more detail, progress was assessed for each goal type. More families dropped goals, completed goals, and made progress toward goals in the health area than in any other area. On the other hand, more families had health goals than any other kind. In general, there is no indication that it is easier for families to make progress toward one type of goal than toward any other type.

Table 3-10 Percent of Families with Goals of Different Statuses

	Jackson	Las Vegas	New Haven	Oklahoma City	St. Peters-Burg	Salem	Over-all
	N=36	N=38	N=21	N=29	N=36	N=40	N=200
Completed	47	66	19	38	33	65	48
Some progress	67	32	0	28	17	78	41
Dropped	28	8	14	10	17	40	21

Unfortunately, this information about the status of goals is somewhat incomplete; many staff members did not provide it, so information is available on only about half of the goals that were set for the families. Even these limited data, however, showing that nearly half of the families in the CFRP sample have completed at least one goal, can be viewed as a positive sign of program effectiveness. The fact that 40 percent have made some progress toward at least one goal is a second positive sign. Further information on goals with more rigorous reporting will aid in future attempts to analyze and interpret these types of data.

3.6 Program Participation and Services

The quantity and quality of a family's participation in the CFRP and the benefits they derive from the program may be measured by such variables as: the frequency and content of home visits; the frequency and focus of direct services and referrals; and the frequency of center sessions and meetings. These variables are discussed in this section for the families in the impact study CFRP sample.

Home Visits

As has been indicated, at the time the FRI 1 and the PI 2 were administered the families in the CFRP sample were just entering the program. In New Haven and Oklahoma City particularly CFRP staff were just beginning to work with these new families. According to staff report (FRI 1), 20 percent of the families had had only one visit, 32 percent two or three visits, 25 percent four or five visits, and 22 percent more than five visits. The Jackson program averaged 6 or more; St. Petersburg and Salem followed with 4 or 5, then Las Vegas and New Haven with 2 or 3, and Oklahoma City with 1 ($p<.01$). Only 87 percent of the families responding to the PI 2 had seen a home visitor or family advocate. In Salem and St. Petersburg 4 or more visits predominated, in Jackson 2 or 3, in Oklahoma City 1, and in Las Vegas it varied ($p<.01$; as noted earlier, only 5 families in New Haven were interviewed, as many of the sample families had not yet become involved in the program.) The minor discrepancies between the two sets of reports can be accounted for by the fact that a slightly different sample of families is involved for each instrument and by the two sources of data--staff and parents. In any event, it is clear that most of the programs were not in full swing where these new families were concerned.

This initial impression is strengthened by parents' reports on the content of visits--intake activities or a meeting--and the actions engaged in most by the family visitors. Listening was most commonly reported; in fact, 70 percent of the families said the visitor listened "very often." The only other actions to occur with any frequency were giving information (30% "sometimes," 27% "very often"), and telling the family how to care for the child (30% "sometimes," 15% "very often"). Listening and giving information are, of course, precisely those actions which would typically be engaged in during the assessment and enrollment process.

Parents reported that the CFRP staff member with whom they had had most contact was a family worker (93%)--that is, a family advocate or home visitor. According to staff report (FRI 1), in 52 percent of the cases only one staff member had been involved with the family and in

22 percent two people had been involved. Three or more were usual in Salem, two in Jackson, one in Oklahoma City, St. Petersburg, and Las Vegas, and the number varied in New Haven ($p<.01$.) This is about what might be expected, given the team approaches to the delivery of program services employed in Salem, Jackson, and New Haven (see Volume II, Chapter 2 of this report.)

At the time the PI 3 was administered, in spring 1979, families continued to report that the CFRP staff member with whom they have most contact is the family advocate or home visitor (89%)--the people described in Section 3.2. According to staff report in spring 1979 (FRI 2*), 38 percent of families are seen once a month or less, 31 percent every other week, 23 percent weekly, and 8 percent more than once a week. The frequency of visits differs across sites, with once a month or less more frequent than other categories in Jackson, Oklahoma City, and St. Petersburg; daily or weekly more frequent in Las Vegas; and frequency of contact split across daily/weekly, every other week, and once a month or less in New Haven and Salem ($p<.10$).

A record of home visits is also included in the FPR. Table 3-11 shows means of recorded home visits by home visitors and family advocates combined for Quarter 1 (September-December 1978), Quarter 2 (January-March 1979), and Quarter 3 (April-June 1979). It is immediately obvious that these figures are in serious conflict with those reported in staff interviews. The overall mean of visits per month to those families for whom data are available in all three quarters is approximately 1.4. Furthermore, number of mean visits

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*Family Review Interview 2 was administered to the family workers assigned to the families in the impact study CFRP sample (N of families=201).

Table 3-11 Mean Home Visits per Family

	Jackson	Las Vegas	New Haven	Oklahoma City	St. PetersBurg	Salem	Overall
Q1	N=37	N=37	N=26	N=28	N=35	N=40	N=203
	7.3	2.2	2.3	1.6	7.2	6.7	4.8
(SD)	(4.2)	(2.1)	2.4	(0.7)	(4.9)	(2.8)	(4.1)
Q2	N=35	N=37	N=12	N=26	N=36	N=40	N=186
	5.6	3.1	3.3	1.8	5.0	5.5	4.3
(SD)	(3.3)	(2.5)	(3.9)	(1.3)	(4.4)	(3.3)	(3.5)
Q3	N=35	N=36	N=13	N=21	---	N=35	N=140
	3.2	3.2	2.9	2.5		4.3	3.4
(SD)	(3.0)	(2.3)	(1.8)	(0.7)		(2.4)	(2.4)
Total	N=34	N=34	N=4	N=18	---	N=35	N=125
	16.6	8.7	8.3	6.2		17.2	12.8
(SD)	(8.1)	(4.3)	(5.7)	(1.6)		(6.7)	(7.5)

Note: Ns refer to families, not to visits.

per quarter declines drastically over the nine-month period. It appears likely that this is because the intake and assessment process was still going on for these familes during the first two quarters, and that that occasioned a large number of home visits. In Jackson and Salem, where families were assessed and enrolled earlier than in other programs, the means are high for the first quarter, drop off in the second, and drop still further in the third--although the Salem program still continued to conduct more visits than others. (Site differences were significant at the $p<.01$ level for Quarters 1 and 2 and for the entire period, and at the $p<.05$ level for Quarter 3.) The same finding applies to St. Petersburg--another comparatively early starter--except that forms for the third quarter were received from this program too late to be analyzed. Conversely, in the Oklahoma City and New Haven programs, which were last to enroll their sample families, the means start off low and increase--although the New Haven mean drops off again in the third quarter, and both programs continue to lag behind others. The means for the Las Vegas program, which was also slow to get under way, are roughly comparable to those for New Haven. Over the entire nine-month period, the means in Salem and Jackson are almost double those for any other site. (However, note that figures from all three quarters were available in New Haven for only 4 families.)

Home visits are roughly an hour in length at all sites. It is possible to compute an approximate amount of time spent in home visits per month during Quarters 1-3 as one measure of program participation; the results for five sites are shown in Table 3-12. (Note that New Haven is not included in the table because complete data were available for so few families at that site.) A full 40 percent of families spent less than an hour per month in home visits. Site differences were significant ($p<.01$). Only in Salem and Jackson did substantial proportions of families have more than 2 hours a month of home visits; St. Petersburg and Las Vegas were roughly comparable; in Oklahoma City no families had been visited for more than 1 hour per month.

Table 3-12 Time Spent in Home Visits (percent of families)

	Jackson	Las Vegas	Oklahoma City	St. Petersburg*	Salem	Overall
	N=34	N=33	N=18	N=33	N=35	N=153
Less than 25 minutes/month	0	18	17	3	0	7
25-59 minutes/month	29	36	83	36	6	33
1 hour-1 hour 59 minutes/month	47	46	0	52	60	45
2 hours or more/month	24	0	0	9	34	15

*Data were available from this site for Quarters 1 and 2 only, so the amount of time has been prorated on that basis.

In fairness, it should be mentioned that some home visits were made that do not show up in the tables, by infant-toddler specialists and other CFRP staff. However, all of these combined would only add about 2.00 visits to the overall mean for the three quarters; the overall mean of visits _per month_, then, would be approximately 1.65. Clearly these programs are not conducting home visits as often as family workers have reported for the CFRP sample in interviews and for CFRP families in general on the staff background questionnaire (see Volume II, Chapter 6 of this report).

Services and Referrals

Although it appears that a large proportion of the CFRP sample families have contact mostly with one staff member, the family worker, this does not mean that no other staff member is concerned with these families. During the month preceding the FRI 2, two-thirds of these families had been discussed by the family worker with a supervisor. These discussions were more frequent in Las Vegas and less frequent in Jackson and St. Petersburg ($p<.01$). Family workers had also discussed many of these families with other staff members, including other family workers or specialists.

In response to the BQ, in spring 1979, family workers indicated that parents in 32 percent of the families had expressed a specific concern about the focal infant, and 48 percent about an older child. The most common staff action for both types of concerns was discussing the situation with the parent. For concerns regarding older children, some program-related action was also common. However, in response to the FRI 2, CFRP staff indicated that in cases where a family has a school-age child as well as an infant (16% of all families) they have often (41% of the time) done nothing for the older child. When they have done something, it is most frequently some service for the child (28%), meeting with the Head Start teacher (13%), or talking with the parent about the child's schooling (12%).

For concerns regarding both the focal child and older children, a common response is referral to another agency. As discussed in Chapter 6 of Volume II, referral is a major form of service provision in all six CFRPs. The FPR includes referral information on the CFRP sample families over the period from September 1978 to June 1979. The mean number of referrals per family across all sites except St. Petersburg during this period was 3.3--roughly one per quarter. Means for Q1, Q2, and Q3, respectively, were 1.4, 1.0, and 0.8. There were significant site differences ($\underline{p}<.01$), both by quarter and overall; Salem, St. Petersburg, and Las Vegas had the highest means. It is interesting to discover Salem in this group, given that CFRP staff at that site reported in interviews during site visits that they do not consider referral a primary means of delivering services, preferring to provide services directly. On the other hand, one would expect Las Vegas to be included in the high-referral group, given that staff's view of the program as a connection between client families and community agencies. (For a discussion of this issue, see Chapter 6 of Volume II.)

Table 3-13 summarizes the data on types of referrals; the numbers refer to the percentage of families for whom at least one referral of a given type was made. (Note that the significant variation among sites in number of referrals means that the significance of variation in types of referrals must be interpreted with caution.) More families were referred for health-related needs than for any other category; the proportion was especially high in Salem ($\underline{p}<.01$). As

Table 3-13 Percent of Families with Each Referral Type

	Jackson N=37	Las Vegas N=39	New Haven N=33	Oklahoma City N=33	St. Petersburg N=37	Salem N=40	Overall N=219
Developmental	5	10	0	9	24	8	10
Day care	0	15	0	6	51	43	20
Health	30	56	6	42	49	75	44
Economic	24	80	3	33	8	35	32
Employment	3	41	0	12	62	13	22
Job training	5	23	6	3	16	10	11
Housing	8	18	9	21	22	43	21
Education	8	23	9	6	27	18	16

shown in Table 3-8, a large proportion of families at that site had health-related goals; as noted, the health component of the Salem program is particularly active, so a relatively large number of health referrals is not surprising. The second most frequent referral type overall was economic, with Las Vegas very high on this category ($p<.01$). It is not immediately clear why this should be the case in Las Vegas, given that the families in the CFRP sample at that site had the highest mean household income; Las Vegas also had the smallest percentage of families (21%) who reported welfare as their primary source of income and the highest percentage (62%) with wages as their primary source. On the other hand, a large proportion (64%) of the mothers in the Las Vegas CFRP sample are teenagers living with their parents or other members of the extended family. This accounts for the relatively high incomes, and also suggests a possible reason for the large proportion of economic referrals: it appears that in a substantial number of cases the CFRP family worker may be endeavoring to assist the mother of the focal child in gaining independence from the extended family, and this may occasion referrals for economic aid.

The third most frequent referral type was employment, with St. Petersburg significantly higher than other sites ($p<.01$); again, this may be compared with Table 3-8, which shows that a large proportion of St. Petersburg families had goals in the employment area. Housing referrals were almost as common as employment referrals, and were highest in Salem ($p<.05$); as reported in Chapter 2, it appears that CFRP families at that site move frequently. (This is also substantiated by staff reports in interviews during site visits.) Referrals for day care were also nearly as common, with high frequencies in St. Petersburg and Salem ($p<.01$).

Provision is also made on the FPR for an indication of which family members are the focus of a referral. As shown in Table 3-14, parents are by far the most likely to be the family member concerned; the second highest category is parents and children. This is hardly surprising given the similar focus of family goals, as shown in Table 3-9. However, it is interesting in light of the discussion of family needs as perceived by parents and staff in Section 3.3 above: again, it appears that the CFRP is in fact addressing itself to family needs and not simply to child needs, just as parents seem to want.

Table 3-14 Percent of Families with Referrals for Given Family Members

	Jackson N=37	Las Vegas N=39	New Haven N=33	Oklahoma City N=33	St. Peters-Burg N=37	Salem N=40	Overall N=219
Parent	49	72	24	46	84	88	62
Focal child	3	51	0	24	27	28	23
Other child	8	3	0	15	32	18	13
Parent and child	19	80	3	18	19	48	32

Center Sessions

As with home visits, at the time of the PI 2 and FRI 1 there had been relatively little activity for the CFRP sample families in the form of center sessions or meetings. Only 59 percent of the families had been to the CFRP office or center prior to the PI 2. Center visits were less frequent in Oklahoma City than at other sites ($p<.01$; note that New Haven was not included in this comparison because so few families at that site were included in the PI 2). Most families (79%) who had been to the center at all had visited it 1 to 4 times. In many cases this had been for a meeting, frequently an assessment meeting. Similarly, according to staff report (FRI 1) only 35 percent of families had been involved in any center sessions, with a higher proportion in Salem than at other sites ($p<.01$). Only 20 percent were attending center-based activities, mostly the infant-toddler program for one or two days a week, about two hours a day with one child. Again, more Salem families were involved than at other sites ($p<.01$).

According to the FPR, the families attended an average of about one infant-toddler session per quarter during the period from September 1978 to June 1979 (Table 3-15). (Again, note that no data were available from St. Petersburg in the third quarter.) There was wide variation across sites ($p<.01$); in Jackson the overall figure for the period was 0.6, an average of 0.2 sessions per quarter, and in Salem the overall figure was 5.9, an average of nearly 2 per quarter. However, even this latter figure is far below the weekly or bi-weekly sessions reported as planned by the programs. As noted in Chapter 6 of Volume II, it is clear that attendance at infant-toddler sessions is generally very low.

Table 3-15 Mean Center Sessions

	Infant-Toddler	Parent Education	Parent Meetings	Social Activities
Q1 (N=203)	0.9	0.9	0.4	0.3
(SD)	(1.8)	(1.7)	(1.5)	(0.7)
Q2 (N=186)	1.0	0.8	0.2	0.4
(SD)	(2.2)	(1.8)	(0.8)	(1.4)
Q3 (N=140)	0.9	0.6	0.3	0.3
(SD)	(2.2)	(1.5)	(1.1)	(0.7)
Total (N=125)	2.8	2.4	0.9	1.4
(SD)	(4.8)	(4.0)	(2.5)	(2.4)

Note: Ns refer to families, not to visits.

Unfortunately, it is not possible to sum across the rows to get a mean total of center sessions per quarter or overall, as this would almost certainly result in double reporting. It is entirely likely, for example, that in many cases an infant-toddler session and a parent education session or parent meeting reflect just one visit to the center--given what CFRP staff report about how center sessions work (see Chapter 6 of Volume II). At many sites it is typical that parents attend a meeting while their children are worked with by infant-toddler staff. In any event, the means for parent education sessions are slightly lower than for infant-toddler sessions, and those for parent meetings are still lower (Table 3-15). Jackson has by far the highest overall mean for parent education sessions (5.6), and Salem has the highest for parent meetings (1.9). There is less variation across sites in social activities, with Jackson the highest (2.2) followed by Salem (1.7). Finally, there is no indication of any consistent increase or decrease of center sessions over the reporting period.

When information on center sessions and home visits are looked at together, it appears that there is remarkably little program contact with the CFRP sample families. This suggests either that the experience of these families is somehow atypical (and there has been no other indication to suggest that) or that CFRP families in general are less involved with the program than would appear from program study findings.

3.7 Individualization of Services

A major theme in the CFRP philosophy is the individualization of program services to meet the specific needs of specific families. Clearly if this is to be done effectively the staff member assigned to work with a family must be knowledgeable about that family's needs. Staff knowledge is the first issue discussed in this section. The presentation then turns to the issue of service differentiation *per se*--the ways in which staff members endeavor to match services to needs.

Knowledge of Family Characteristics

At the time of the FRI 1, the family workers had had limited contact with the CFRP sample families. Therefore, a substantial number of questions were answered "Don't know" for a large proportion of families. (As would be expected, "Don't know" responses were particularly prevalent in New Haven.) Staff members' knowledge of the families they work with varied a great deal depending on the kind of judgment that was required. For example, 50 to 77 percent of the time family workers were unwilling to comment on the discipline used in the household (that is, they answered "Don't know" to questions about this issue). About 20 to 40 percent of the time staff could not comment on ties with the extended family, contact with the community, management of child care, attitudes toward the child, financial status, housing problems, employment problems, and family problems. In relatively few instances (9 to 15%) staff were unable to comment on the condition of the home, families' use of community services, and health problems. Thus, the family workers were unwilling to comment on the sorts of behaviors and circumstances that one needs to observe over a period of time in order to make a judgment, but were quite knowledgeable about things that could be easily observed in one meeting with the client (condition of home) or asked about in initial interviews (health problems, use of services).

The same generalization applies to questions about the focal child and the parent-child relationship. Few staff did not answer a question about the appropriateness of the child's weight (11%), and relatively few (21%) avoided the issue of judging a parent's feeling about the disposition of the child. About 40 percent could not comment on the parent's feelings about the baby's eating and sleeping patterns; about 50 percent could not respond to questions about the baby's mood when eating or being dressed; and about 60 percent could not comment on the regularity of the baby's sleeping and eating patterns. As would be expected, answers to each question were more frequent in Jackson and St. Petersburg where staff had made more visits to their families, less frequent in New Haven. The latter issues require information based on a number of visits of the staff member to the family, and these family workers refrained from making judgments too quickly.

The BQ included the same focal child and parent-child questions as the FRI 1, thus providing a comparison of staff knowledge of families between fall 1978 and spring 1979. The frequency of "Don't know" responses is much lower on the BQ than on the FRI 1; it is also low in absolute terms. The range is 2 percent (to a question on parents' feelings about sibling rivalry) to 19 percent (to a question on baby's reaction to separation.) The mean percentage of "Don't know" responses for the 11 questions on the infant temperament scale is 7.5, the median 6. By spring 1979, then, most family workers were willing to comment on the focal children and on parent-child relationship, presumably because they had had sufficient contact with the families by that time to feel reasonably knowledgeable.

Service Differentiation

As noted above in Section 3.6, in response to the BQ family workers indicated that parents in 32 percent of the families had expressed a specific concern about the focal infant, and 48 percent about an older child. The infant-related concerns had mainly to do with child health (56%) or the baby's growth and development (31%); staff action taken usually included discussing the situation (47%) or referring the family to another agency (44%). The focus of the concerns for older children included behavior management (37%), social development (30%), or child care (30%); staff actions included discussing the situation (61%), suggesting alternatives to the parent (50%), taking some program-related action (43%), or referring the family to an appropriate agency (37%). The differences between the concerns regarding infants and those regarding older children and the variety of staff actions indicated suggest that CFRP family workers are in fact endeavoring to individualize program services to meet the specific needs of the families for whom they are responsible.

In response to the FRI 2, family workers indicated that they emphasize different content areas and services in dealing with different families. Major emphases have included improving parenting (38%), child development (34%), providing parent services (28%), personal growth experiences

(25%), educational counseling (24%), arranging child services (24%), program participation (23%), job training (20%), and family management (19%). More emphasis is placed on improved parenting in Jackson than at other sites ($p < .10$). More educational counseling occurs in Las Vegas ($p < .05$); this is most likely due to the fact that mothers are younger at that site, and a large proportion are still in school.

In response to a direct question about how staff individualize the program for each family, the most frequent response (61%) was providing referrals; these occurred less often in Jackson than elsewhere ($p < .05$). The next most common was emphasizing a specific component of the program (35%); this was never reported in New Haven and rarely in Salem, but is frequent at the four other sites ($p < .05$). Other examples of how family workers individualize include fitting teaching to the parent's educational level (21%, most often in Jackson, $p < .01$), scheduling home visits at the convenience of the parent (11%), and spending extra time with the family (10%).

3.8 Satisfaction and Success

In examining the question of the degree to which the CFRP appears to be satisfactory to the participants in the program and successful in achieving its goals, the following issues are particularly salient: the family's view of the staff members who work with them and of the family/staff relationship; the family's view of the program and of whether their needs are being met; the staff's view of the families, both in terms of staff/family relationship and in terms of the family's progress. These issues are discussed in this section, for the families in the impact study CFRP sample and the staff members assigned to work with them.

Family View of Staff

Parents' initial impressions of the CFRP staff assigned to work with them, as reported in the PI 2, were very favorable. Most (94%) saw the staff as helpful or very helpful; 81 percent felt that the staff had a good idea of the families' needs. Almost all (96%) reported feeling very comfortable or comfortable with staff; 63 percent viewed the family worker as a friend, and an additional 13 percent viewed her/him as a member of the family. When asked about congruence of child-rearing ideas, 83% percent said they and the staff member had very similar or similar ideas; 75 percent indicated that such a similarity of views is very important or somewhat important. There were no significant site differences on these measures.

By spring 1979, when the PI 3 was administered, parents' responses to these and similar items had not substantially changed. The great majority reported that the CFRP family worker spends the right amount of time with them (85%) and is always available when needed (83%). About two-thirds strongly agreed or agreed that the staff do what they (the parents) want for the family. Again, 93 percent strongly agreed or agreed that they are comfortable with the family worker; 64 percent view her/him as a friend, and an additional 17 percent as a member of the family. Families in New Haven were somewhat more likely than those at other sites to characterize CFRP staff as people they work with or as professionals who provide services ($p<.05$). In terms of child-rearing ideas, 79 percent said they and the staff have very or somewhat similar ideas, and 75 percent said this is important. Salem families were more likely to say that the staff's ideas are different from theirs ($p<.05$), but they were also more likely to say that agreement is not very or not at all important ($p<.05$). All in all, then, on a variety of dimensions these parents continue to hold a very positive view of the CFRP staff who work with them.

Family View of Program

Most parents also had positive first impressions of the CFR program, as reported in the PI 2. Most (89%) were very satisfied or satisfied; only 14 percent had any specific complaints. Major reasons for liking the program included socializing (21%), child care (12%), support with problems (10%), and learning about child growth and development (10%). As reported above, in Section 3.3, the majority of parents also indicated that friends and members of the extended family had positive attitudes toward the CFRP.

At the time of the PI 3, parents continued to report satisfaction with the program. About two-thirds (68%) are satisfied with the amount of time demanded by program activities; 26 percent would like to spend more time in the program. In terms of program activities, 79 percent of the parents strongly agreed or agreed that the CFRP finds activities that are right for them and their children; 71 percent are pleased with center-based activities; 51 percent indicated satisfaction with how much "say" they have in what is done during home visits. On the other hand, 50 percent indicated they would like to be more involved in decisions regarding how the program is run.

There were few negative reports, although 42 percent of the parents did indicate they have difficulty getting to program activities, either because of transportation problems or because of the hours at which meetings were held. Only 18 percent mentioned changes they would like to see in the program; these were suggested more often in Salem and Jackson than at other sites ($p<.05$). Most of the changes were in the area of providing more child care (64%), although a few concerned employment counseling and satisfying immediate needs, with one each in the areas of health care, housing assistance, and educational assistance.

Interestingly, the majority of families (76%) feel that the CFRP has not had any influence on their interactions with other community agencies. Among those who think it has had an influence, 67 percent see other agencies as being more cooperative now.

Parents were also asked once again about the attitudes of family members toward the CFRP; 72 percent feel that their families greatly favor or favor the program. Similarly, 63% of the families believe their friends are supportive of their participation. In general, then, as of spring 1979 the parents in the CFRP sample, as well as their families and friends, were well satisfied with the program and its services.

Staff View of Families

As reported in Section 3.3, at the time of the FRI 1 family workers generally gave the families in the CFRP sample a good prognosis for success. At that time, these staff members viewed the families as clients they were concerned about (55%) or as clients they were fond of (24%). This contrasts somewhat with the perceptions of the parents (PI 2), who tended to see the relationship as a closer one: 76 percent viewed the family worker as a friend or a member of the family.

At the time of the FRI 2, this contrast still held. Most parents were described as "People I provide services for" (36%) or "People I work with" (32%). The parents, however, continued to view the family worker as a friend or a family member (PI 3). Further, while the majority of parents feel that they and their family worker have similar ideas about raising children, and that that is important, staff responded to a broader question in this domain as follows: 33 percent of the parents are described as having similar values to the family worker, and there is good communication; 33 percent have different values, with good communication; 27 percent have different values, with bad communication; 8 percent have similar values, with bad communication. With 54 percent of the families the staff claim that the relationship is "typical"; if it is different, the reason is limited contact (45%), that the family is very uncooperative (32%), or that there is especially good rapport (26%).

By spring 1979, family workers had noted a number of signs of progress in the families (FRI 2). They most frequently recorded "personal growth" (39%), "taking more responsibility for own needs" (38%), "making progress toward goals" (29%), and "taking more responsibility for the child's needs" (28%). Staff felt that about 48% of the families should attempt new goals. This was less true in Salem and St. Petersburg than at other sites ($\underline{p}<.01$). The goals staff thought families should be pursuing were mostly "nonhealth developmental" (52%) or "other social" (41%).

The other kind of progress on which family workers commented was independence from the program. Most families are seen as very independent of CFRP (36%) or independent (24%). For an additional 25 percent independence seems to vary, leaving 16 percent dependent or very dependent on the program. Staff tended to base a judgment of independence on the fact that the parent is a self-sufficient, capable person (37%), that the parent seeks program help for specific needs (26%), that the parent feels no need of the program (23%), or that the family relies on other services (24%).

There is something of a paradox here, in that a parent's feeling no need of the CRFP and relying on other services is seen as indicative of independence--and therefore, presumably, of progress. Yet a major frustration faced by

CFRP staff, as reported in interviews, is a lack of program participation on the part of CFRP families. This paradox is to some degree inherent in the CFRP philosophy. Family independence is supposed to be encouraged, yet so is family participation in the program. No doubt it is often difficult in a specific case to judge whether chronic nonparticipation is a positive sign of family independence or a negative sign of parental disinterest.

In any event, it appears that as of spring 1979 the staff members assigned to work with the CFRP sample families, like the parents in the families themselves, held a generally positive view of the interactions between the families and the program. Further, they seem to believe that the program is doing some good.

3.9 Interpretive Summary

This chapter has attempted to provide an aggregate description of the CFRPs at the six impact study sites as experienced by the families in the CFRP sample: the staff assigned to work with them; the intake and assessment process and the needs of the families at program entry; parent and staff expectations of program benefits at time of entry; goals set and progress toward those goals; level and content of program participation and services provided; individualization of services; and parent and staff satisfaction with program benefits. From an evaluation standpoint, two essential questions remain: (1) How are these variables associated with family outcomes? (2) To what degree is the experience of these families typical of that of CFRP families in general? The first of these questions is examined in preliminary fashion in Chapter 4, and will be explored in depth as the CFRP evaluation continues; it can only be touched upon here. The second question can be addressed more directly.

As is shown clearly in Section 3.2, the CFRP family workers--home visitors and family advocates--assigned to the families in the impact study CFRP sample are closely comparable to CFRP staff members, and especially family workers, in general. The summary of demographic, background, and status variables presented at the end of the section essentially matches the picture of CFRP workers provided by the program study and presented in Chapter 4 of Volume II.

Similarly, the intake and assessment process undergone by these families as described in Section 3.3 appears to match closely the more general description developed by the program study (and presented in Chapter 6 of Volume II). Typically, the process includes collecting information, assessing needs, identifying goals, developing an action plan, and signing an agreement. It involves the family worker, plus other CFRP staff, and may also involve representatives from other community agencies. The parents play a major role throughout. It cannot be known at this point to what degree the status and needs of these families, as presented in Section 3.3, are typical of CFRP families in general. The same holds true for family and staff expectations, covered in Section 3.4, and family goals, discussed in Section 3.5.

A more significant issue, but a no less problematic one, is the degree to which the level of these families' participation in the CFRP and of services provided to them is representative of all CFRP families. Clearly, according to staff records, the CFRP sample families are in contact with the program a good deal less often than has been indicated in the past for CFRP families in general. Specifically, according to program study reports, the mode for family contact is once a week, the mean 1.6 times (see

Chapter 6 of Volume II). Putting the best possible interpretation on Family Participation Records, it appears that the mean of program contacts with the CFRP sample families cannot be much above twice a month. The question is whether the treatment these families are receiving is for some reason atypical or whether the program study figures are inflated. At this point there is no evidence favoring the former explanation: it appears more likely that the program study description may simply apply to a perceived ideal level of participation rather than actual level.

If this latter explanation is the correct one, and CFRP families are in contact with the program considerably less than is considered ideal, is this the fault of families or of staff? There are two major forms of staff/family contact: (1) home visits, the frequency of which is to some degree under staff control (although a number of factors may reduce the family's availability for such visits); and (2) center sessions, attendance at which is largely under family control (although program staff control the frequency with which such sessions are offered). Thus, to the extent that the frequency of home visits falls below planned levels, this may be partially the fault of staff; to the extent that attendance at center sessions is down, this would appear to be primarily parents' fault. At this point it appears that both forms of contact are considerably less frequent than expected--but it is too early to begin to assign responsibility for this. Of course, it also cannot yet be known for certain that more contact is better, much less what is an ideal level of participation; such a determination must await analyses of associations between program variables and family outcomes.

Another variable in the general domain of program participation and services which is readily quantifiable is that of referrals (note that direct services are not so easily measured). It is not known to what degree the referral figures reported in Section 3.6 for CFRP sample families are representative of level of referrals for CFRP families in general. Further, it cannot be known whether this level--roughly one referral per quarter--is adequate to meet family needs without knowing those needs in more detail. A similar problem exists where individualization of services is concerned (discussed in Section 3.7); this is a difficult construct to measure, and ultimately the question of whether services have been individualized to an adequate degree--like the question of adequacy of referrals--must await the measurement, analysis, and interpretation of outcomes.

With all of this, however, it can be said that in the eyes of parents of the CFRP sample families and in the eyes of CFRP staff serving them the program is meeting the families' needs. Levels of satisfaction and of perceived success, as reported in Section 3.8, are very high. This is no doubt related to the fact that the goals set and the referrals made appear to be addressed very directly to family needs--and not child needs alone--as perceived by parents and staff. Whether this translates to measurable impact and differential outcomes for families and children in the CFRP group as compared with those in the control/ comparison group remains to be seen.

Chapter 4

PRELIMINARY PROGRAM IMPACT

This chapter examines program impact on families after six months of participation in CFRP. The discussion is necessarily preliminary for a number of reasons. First, it would be unrealistic to expect to find strong evidence of program impact after families have been in the CFR program for such a short period of time. A number of the problems the CFRP families face are long-term in nature; in such cases, it may not be reasonable to expect positive impact after only 6 months. For example, it is unlikely that family circumstances--in terms of such things as family income or reliance on public assistance programs--would change in such a short period of time. Similarly, changes in parenting skills or the amount of positive interaction between mother and child may not become apparent until the family has been involved in the program for a longer period. Finally, it should be noted that not all families in the CFR program received the same treatment since becoming enrolled. Significant differences were detected across the six impact study sites as well as within sites. Some families participated in program activities on a regular basis; for others treatment started up late or has been sporadic, as was discussed in Chapter 3.

Program impact is the focus of two of the evaluation substudies--the impact study, which compares the CFRP treatment group with the control/comparison group at each site, and the in-depth study, which focuses only on the CFRP group. The latter study is designed to examine relationships among family background characteristics, perceived family needs, various program processes (including goals set, referrals made, and level of family participation in the program), and family outcomes. This chapter includes examination of the relationship between family needs as perceived and reported by staff and the focus of the CFRP treatment (specifically, goals and referrals). For example, if problems or needs in the area of family economic status were identified by staff when a family entered the program, were these translated into goals for the family and into referrals to agencies which can provide assistance in meeting such needs? An attempt was also made to determine the relationship between goals, referrals, and level of family participation in the program on the one hand and changes in family status on the other. Ultimately, the in-depth study will address one of the key policy questions of this evaluation, concerning the types of families who are likely to benefit most from participation in CFRP. A related question concerns the types of program processes which are found to be most effective in producing maximum benefits to families enrolled in CFRP.

The impact study, on the other hand, relies on tests of differences in means between the CFRP and control/comparison groups in an attempt to identify any major program impacts on families and infants at each data collection point. These tests are relatively weak, since they do not take into account any participant differences in background characteristics. Analyses of covariance on selected outcome measures were used to provide more powerful tests of group differences and possible program effects. In addition, an attempt was made to examine changes that occurred from fall to spring on selected outcome measures. (In a number of instances, the within-site size of the samples of families with changes in status was extremely small, preventing meaningful analysis of change scores.) On continuous variables--for example, those concerning parent comfort and frequency of feeling hassled about situations--changes in status were computed as deviations from the expected core at T2 (spring) on the basis of data obtained at baseline (T1--fall).

Analysis for the impact study is severely restricted at this point by the fact that data on family needs are available only for the CFRP treatment group, and not for both groups. If the latter were the case, it would be possible to make group comparisons only among those families who had a perceived need in a certain outcome domain. The analysis could examine in what ways and to what extent the program is effective in meeting family needs by comparing a subgroup of CFRP families with a subgroup of control/ comparison families with similar needs. Although family needs data are not available for both sets of families at the present time, an attempt will be made to collect such data during the next phase of the CFRP evaluation.

This chapter addresses four of five outcome domains that were selected for the CFRP evaluation. These domains are closely linked to CFRP objectives and therefore are likely to be affected by family participation in CFRP. The five outcome domains are:

- family circumstances (employment, education, income, housing, and so on);
- maternal and child health;
- parent-child relationship and interaction;
- child development and achievement; and
- family capacity for independence (use of community resources, locus of control and coping strategies, affiliation with family and social networks).

Child development and achievement are not addressed here because only minimal data were obtained in the first six months of the CFRP evaluation. Child development data obtained from reports by parents during this period concerned the child's weight and height, and are included as part of the discussion of child health status. In fall and winter of 1979-80, child development and achievement were measured directly using the Bayley Scales of Infant Development, and this will be the focus of a report to be prepared in late spring 1980.

Some of the outcome measures reported in this chapter may not be directly related to perceived needs or family goals at any of the six sites. However, three of the outcome domains--maternal and child health, parent-child interaction, and child development--are central to the overall objectives of CFRP. In these three domains, particularly the latter two, it is expected that group differences will emerge in the future as a direct result of family participation in CFRP--even for families that do not perceive needs or set goals in these areas. In the other two domains, family circumstances and capacity for independence, data on family needs would strengthen the group comparisons.

Family circumstances and socioeconomic status are addressed in Section 4.1; presented here are data on the employment status of mothers, number of wage earners to support the family, income sources, per capita income, use of public assistance programs, and changes in family composition or household size. Maternal and child health, including prenatal care and utilization of health care facilities, are the focus of Section 4.2. Various aspects of parent-child interaction are explored in Section 4.3; data are reported here concerning the infant's temperament and situations that commonly occur with young children, parents' comfort with their children, interactions of the mother and other family members with the focal infant and older children, and expectations for the children. Section 4.4 addresses the issue of the family's capacity for independence; the discussion in this section focuses on how parents cope with problems, as well as their use of informal and formal support networks. Preliminary findings after six months of participation in CFRP are briefly summarized in Section 4.5.

In each of the sections below, a rationale is presented for including specific variable domains, as well as a review of CRFP program objectives relative to each domain. Sections 4.2 through 4.4 also provide descriptive information about the status of families at both data collection time points--fall and spring. Data reported in Section 4.1 focus on the socioeconomic status and circumstances of families only in spring, as baseline data were presented earlier, in Chapter 2. P values reported in the sections reflect multiple tests of significance by variable domain.

To provide a context for the discussions of program impact that follow, it is helpful to examine the changes and other events that occurred in the lives of the CFRP families during the past six months. Mothers were given a list of 26 situations concerning family composition, health status, family circumstances (employment, education, finances, and housing), and other events, such as changes in social activities or contact with family members. The CFRP mothers indicated that an average of 4.2 events or changes (S.D.=2.9) had occurred in the past six months. Changes in family circumstances and other events not related to health or family composition were reported most frequently, as indicated in Table 4-1.

Table 4-1

Number of Changes by Category in Past Six Months

(CFRP)

	N	Mean	S.D.
Family circumstances (employment, income, housing)	188	1.43	1.29
Other events/changes	188	1.36	1.29
Family composition	188	.98	1.06
Health (1 item)	188	.41	.63

No differences were detected between the CFRP and control/comparison groups on the number and types of changes that occurred in the past six months, nor were across- or within-site group differences found. In the following section, changes reported by mothers in family circumstances and composition are examined more closely.

4.1 Changes in Family Circumstances

In describing study families in Chapter 2, we presented data on several aspects of family circumstances:

- household composition and family structure (single- or two-parent status, marital status, number of children and adults, ages of other children, relative or nonrelative status of other adults);
- indicators of socioeconomic status (household income, per capita income, sources of income, employment status, mother's educational level); and
- housing (rental vs. ownership, subsidized or non-subsidized).

In looking for impacts of CFRP on family circumstances, we examined changes in only some of these characteristics. It is not likely, for instance, that CFRP will affect single- or two-parent status or marital status of families, but it may influence the number and status of adults and children in the home. For instance, single mothers may move from extended family situations as they become older and more independent. Socioeconomic status may also be affected: if CFRP participation encourages parents to continue their education, or assists parents to obtain job training or seek gainful employment, the impacts may subsequently be seen on income, sources of income, and improvements in housing conditions. Finally, we examine family enrollment in public assistance programs which supplement income of low-income families. We turn first to a consideration of changes in socioeconomic status.

Changes in Indicators of Socioeconomic Status

Interviews in spring 1979 with CFRP and control/comparison families covered a wide range of questions concerning the family's socioeconomic status. The same data were obtained in both fall and spring, except that monthly rather than annual income data were collected in spring, as mothers find this easier to recall. Incidence of missing income data is significantly lower in the spring than it was in the fall, as a result. Furthermore, questions were added in the spring interview to obtain more detailed information about mother employment and her preferences for work and use of public assistance programs.

Employment of mothers and job training received major emphasis in the six CFR programs as reflected in family goals and referrals made on behalf of families (see Chapter 3). Employment was a goal for 38 percent of the families; 22 percent were referred for employment assistance since they enrolled in CFRP. Job training also was emphasized:

22 percent of the families had job training goals and 11 percent had been referred to job training programs. Employment and job training were not emphasized to the same extent at all six sites, however, as is noted in Table 4-2; the figures reflect the percentage of families with goals or referrals in the areas of employment and job training.

Table 4-2

Employment and Job Training Goals and Referrals

(percent of families)

	Jackson	Las Vegas	New Haven	Oklahoma City	St. Petersburg*	Salem	Overall
Employment goals	(N=36) 25	(N=38) 50	(N=21) 14	(N=29) 41	(N=36) 56	(N=40) 30	(N=200) 38
Employment referrals	(N=37) 3	(N=39) 41	(N=33) 0	(N=33) 12	(N=37) 62	(N=40) 13	(N=219) 22
Job training goals	(N=36) 25	(N=38) 32	(N=21) 14	(N=29) 10	(N=36) 25	(N=40) 18	(N=200) 22
Job training referrals	(N=37) 5	(N=39) 23	(N=33) 6	(N=33) 3	(N=37) 16	(N=40) 10	(N=219) 11

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*Data for only two quarters are reflected in these figures; third-quarter data were submitted late and could not be included in analyses for this report.

Let us examine whether these family goals had an impact on the employment status of mothers in CFRP. Twenty-eight percent of the CFRP mothers reported in spring that they are employed, compared with 27 percent in the fall; the proportion of working mothers thus remained nearly unchanged. Most employed mothers (63%) currently hold positions which require no special skills. Employed mothers report they are working an average of 31.1 hours per week (S.D.=11.8). They had their current job for the last 1.4 years on the average (S.D=2.3); this differed significantly across sites ($\underline{p}$=.07). Jackson mothers had their current jobs the shortest time ($\bar{x}$=4 mos; S.D.=4 mos). In contrast, New Haven mothers had been on the job an average of 4.9 years.

About one-third of the mothers (36%) heard or read about their current job and arranged for an interview; 19 percent had someone else arrange the interview. Few mothers mentioned that they had obtained their job through a job training program, CETA, or a referral from an employment service. Most (75%) indicated that they had received no help from anyone in getting their job. This is probably due to the fact that most of the mothers with jobs became employed prior to enrollment in CFRP. There is some evidence to indicate that CFRP staff were genuinely aware of the employment situations of the mothers they served. Families of CFRP mothers who indicated they were unemployed at the time of fall and/or spring data collection were more likely than others to be identified by staff as having problems in the area of employment. No group differences were detected between the CFRP and control/comparison group at any of the six sites in the proportion of employed mothers, the number of hours they work per week, or help provided in obtaining the job.

In spring interviews, mothers were asked to specify their preference for working outside the home either full- or part-time or staying home to care for their children. In addition, they talked about what they had done from fall to spring and expected to do in the next six months. As is illustrated in Table 4-3, most mothers (75%) prefer to work. This is about the same for mothers currently employed and those who are providing full-time care for their children at home.

Table 4-3

Work Preferences of CFRP Mothers
(percent)

	N	Work	Stay Home
Unemployed mothers	133	77.4	22.6
Employed mothers	53	69.8	30.2
Total	186	75.3	24.7

Forty-one percent of the mothers reported that they had some type of employment from fall to spring. The percentage of mothers who were employed during the past six months is higher than that reported for mothers currently in the work force. This implies that some mothers worked during the past six months who are now unemployed.

When asked what mothers expected to do in the next six months, 70 percent expected to go to work rather than stay home to care for the children. Most mothers who expect to work in the next six months hope to find full- rather than part-time employment.

At the time of the spring interview, 37 percent of the CFRP mothers indicated that they are currently looking for work or, if employed, want to change jobs. Over half (60%) of the mothers said they had made some progress in finding a job or getting appropriate job training. Forty-six percent of these 37 mothers had been to the employment center, 22 percent had received training or attended school, and 5 percent enrolled in training. Others read about jobs or training (14%) or talked to friends. As indicated earlier, it is clear from service records that CFRP has provided assistance to families in their search for work, in that 22 percent were referred for employment and 11 percent to job training programs.

Mothers who sought employment but had not taken any steps to achieve these goals gave a variety of reasons for this: 38 percent indicated they simply had not tried, 24 percent had problems with child care which prevented them from getting a job, and 13 percent said they lacked skills; other reasons were given by 35 percent of the mothers. When asked what the job market was like in their fields, 40 percent of mothers indicated that jobs are scarce; 31 percent felt that they are available; 11 percent said that the jobs are available but that they require special skills; 18 percent did not know what the job market was like. No differences were detected at any of the six sites between the two groups of families in the proportion of mothers who seek employment or a job change or percentage who had taken steps to find a job.

In the event that the number of working mothers increases in the next six months, as mothers expect, it is plausible to assume that this will have an impact on family income and thus on socioeconomic status. Family participation in CFRP may also be affected by an increase in the number of working mothers. Home visits may be more difficult to schedule, especially for mothers who work full-time. Similarly, attendance at infant-toddler sessions and parent meetings may decrease, unless they take place at a time of day when working mothers can attend. Several analyses were conducted to determine whether family participation in the program is different for mothers who are employed compared to non-working parents. Participation in terms of number of home visits, attendance at center sessions, and number of referrals made is the same for the two groups of families at five of the six sites. In St. Petersburg, employed mothers tend to spend less time in the program in terms of attending parent activities (p=.09) and infant-toddler sessions (p=.09); employed parents also were referred

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less frequently for services (p=.09) than were non-working mothers. No differences were evident, however, in the number of home visits that families participated in, which is considered the best measure of program participation. Analyses will be repeated in subsequent phases of the CFRP evaluation because of ACYF's interest in working parents.

In addition to obtaining information about mother's employment, repeat measures of socioeconomic status were obtained concerning per capita income, income sources, number of wage earners in the family, whether or not the mothers provide sole support for the family, and housing subsidies. In spring, there was no evidence of any differences between the CFRP and control/comparison groups on these variables at any site. It is conceivable, however, that significant effects will appear at these sites over time, as a result of referrals made on behalf of families in the past six months.

Groups differed slightly on two variables*--number of wage earners (Jackson and Las Vegas), and income sources, reflecting the proportion of families who derive income from wages compared to other sources of income (Oklahoma City). These differences were not evident in the fall when baseline data were collected and are not attributable to attrition from the sample from fall to spring. On both variables, the CFRP group ranked lower than the control/comparison group; there were fewer wage earners to support the family, and fewer families that reported wages as a source of income in the CRFP group.

An analysis of covariance** was done on per capita income as of the spring parent interview, to test six-month CFRP impacts further. Different covariates were used, ultimately, within each site, in keeping with the exploratory nature of this study. The results are summarized in Table 4-4; except in Oklahoma, no effect of CFRP on per capita income can be detected. In Oklahoma, it appears that participation in CFRP is associated with a loss in income, of about $400 per person in the household. (Note that while the estimated effect in New Haven is greater in magnitude than that in Oklahoma, it is also less "stable." In fact, we cannot conclude, at the .10 level, that the New Haven difference is nonzero.)

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*Group differences were not statistically significant in multiple t-tests.

**See chapter note.

In the spring, families were asked again about their use of subsidized housing, but not concerning housing quality or parent satisfaction with current housing situation. An increase in the proportion of families who live in subsidized housing, for example, does not necessarily mean that families live in better housing; in fact, they may find themselves in overcrowded quarters, although they may have to pay less to meet their housing needs. In future interviews, we plan to obtain data concerning parent satisfaction with housing and whether their housing situation has improved or deteriorated since enrolling in CFRP. Improvements might be the result of a move to a better or roomier residence or renovations to the current dwelling of the family. In addition, we will find out what role CFRP played in improving the housing circumstances of families.

Use of Public Assistance Programs

In both fall and spring, a substantial proportion of the CFRP families indicated that they received financial assistance through AFDC or the welfare department and were enrolled in Medicaid/Medicare, as noted in Table 4-5.

Table 4-4

Tests of CFRP Impact on Per Capita Income after Six Months[a]

Site	Effect[b]	Standard Error[c]	df	p[d]
Jackson	-.119	.363	28	NS
Las Vegas	-.047	.249	36	NS
New Haven	-.454	.305	25	NS
Oklahoma	-.408	.174	46	<.03
St. Petersburg	-.174	.228	46	NS
Salem	-.078	.228	50	NS

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[a] The tests summarized here are ANCOVAs. The covariates in each site included per capita income as of the previous fall, in addition to:

Jackson--number of wage earners in the family as of the previous fall, and whether or not the family is a single-parent family with no other adults;

Las Vegas--number of wage earners in the family as of the previous fall, and whether or not the respondent was employed in the fall;

New Haven--educational status of the respondent in the fall; race, age, and whether or not the mother lives in an extended family situation;

Oklahoma City--educational status of the respondent in the fall, ethnicity (black, other), and a scaled index of income sources (heavily welfare to largely earned);

St. Petersburg--whether or not the respondent was employed as of the previous fall, whether or not the family was a two-parent family, respondent's age in the fall, and level of education of the respondent in the fall;

Salem--a scaled index of income sources (heavily welfare to largely earned).

[b] This effect is a partial regression coefficient; its metric is thousands of dollars. Thus, in the case of Jackson, a coefficient of -.119 represents $119.00 difference in per capita income between CFRP and control families, with CFRP lower.

[c] This column contains the standard errors of the partial regression coefficients. A t-statistic can be computed by dividing each regression coefficient by its standard error.

[d] All significance tests were two-tailed, as no a priori hypothesis was made about directional impact of the program on per capita income.

Table 4-5

Use of AFDC/Welfare
and/or Medicaid
(percent of CFRP families)

	N	Fall	N	Spring
Welfare/AFDC	229	73	187	69
Medicaid/Medicare	235	85	142	82
Both programs	236	63	187	58

Enrollment in Medicaid/Medicare was slightly higher than for welfare/AFDC. Overall percentages remained virtually unchanged over the period from fall to spring, although at some sites reliance on welfare and/or Medicaid had increased and at some sites it had decreased. In no case could the change be attributable to CFRP intervention.

In addition to questions concerning family participation in welfare/AFDC or Medicaid/Medicare, parents were asked in the spring whether they had been in contact with any type of agency in the past six months to request some form of public assistance. About two-thirds of the CFRP families (62.8%) indicated that they had, although this was not the same at all sites ($p<.01$). Contact was lowest in Oklahoma City (37.5%) and New Haven (46.4%) and highest in Salem (83.9%), Las Vegas (75.0%), and Jackson (71.0%). Group differences were detected at two sites--Jackson and Salem--with a larger proportion of CFRP families reported to have had contact with a social service agency than was the case for the control/comparison group.

Parents had been in contact with several organizations other than welfare/AFDC or Medicaid/Medicare that provide various types of public assistance. It should be noted, however, that no information was obtained to indicate whether or not families received program benefits as a result of their contact with these agencies. Furthermore, we do not know if CFRP brought them in contact with the agencies or in what ways they may have helped to enroll families.

About one-third of the CFRP families (34%) had visited the food stamp office or the local WIC program. This did not differ significantly across sites. Group differences were detected at the St. Petersburg site, however, on this type of agency contact ($p<.01$); contact was twice as high for control/comparison families (82.6%) as for the CFRP group (40.9%). The reason for this group difference is not apparent from the data, but will be investigated further in subsequent visits to that site.

A few (5.9%) of the families had contact with WIN or the local housing authority between fall and spring. Contact was highest in Salem and Las Vegas, where a large proportion of the families use subsidized housing, and almost nonexistent at the other sites. (Across-site differences were not statistically significant, however). No group differences were found at any of the six sites.

Family Composition

In the spring, families in the study answered questions about family composition and marital status similar to those asked in the fall baseline interview. Information concerning family structure, marital status, household size, and number of adults and children in the family was examined. No statistically significant differences between the CFRP and control/comparison groups of families were detected on any of these variables at any of the six sites. Across-site differences in proportion of mothers who are married also remained unchanged from fall to spring.

Summary

Changes in family circumstances were minimal in the first six months of their participation in the CFR program. Approximately the same number of mothers were employed outside of the home in the spring as had been in the fall. No changes were observed in per capita income, income sources, the number of wage earners in a family, the number of mothers serving as sole support to a family, or use of housing subsidies. In addition, there was little change in families' use of public assistance programs or in family composition (number of adults and children in the home, structure of the family, marital status of the mother, and household size). Future data collection will allow us to evaluate whether changes in these areas occur after more lengthy contact with the CFR program or are difficult for any such program to effect.

4.2 Maternal and Child Health

One of the goals of CFRP is to assist families in obtaining preventive and remedial health care for mothers and children. Special emphasis is placed on prenatal care and health care for infants in the program's infant-toddler component. Children enrolled in Head Start receive health and nutrition benefits typically associated with center-based care. The program's aim is to improve the general health status of children and their families, through the delivery of both direct and indirect health services. These include health education to increase parental knowledge of preventive health care, the importance of prenatal care, and appropriate use of health services. In addition, the program acquaints families with health services available in the community and refers family members for specific health care needs. To date, program impact on maternal and child health care is measured by information about the use of health services and reports by parents on the health status of the family.

Prenatal Care and Birth Circumstances

Low infant birth weight and inadequate prenatal care have been associated with a greater incidence of developmental delays in children by several researchers (Golden et al., 1977; Ramey, et al., 1978; Green and Haggerty, 1966). As most families in the study entered CFRP after the focal child was born, it is unlikely that the program had any impact for the sample as a whole on prenatal or birth circumstances, but information about prenatal care and birth circumstances of focal children nevertheless provides important baseline data. In addition to gathering reports from the parents themselves, an attempt is being made to obtain birth records of focal children from State Bureaus of Vital Statistics so that information on birth circumstances can be verified.

On the average, mothers enrolled in CFRP started to receive prenatal care when they had been pregnant for 11.2 weeks (S.D.=6.2), according to their own reports. Prenatal care included periodic checkups for 97 percent of mothers in the CFRP group. One-fourth of the mothers reported that they experienced complications during the course of pregnancy; 17 percent reported multiple complications. Among the most frequently mentioned complications were fluid retention (14%), high blood pressure (10%), and prolonged labor or breach birth (10%). Complications reported less frequently included injuries or difficulties considered serious by the mother and/or her doctor, heavy bleeding, high fever, diabetes, unexpected cesarean section, and problems with medication. Slightly over one-fourth of the mothers (28%) indicated that the delivery of the focal child had been difficult.

In the fall, the majority of the focal children were reported by their mothers to be healthy, normal babies. Only a very small percentage of children (5%) weighed less than five pounds at birth, mostly due to prematurity, and most children (87%) came home from the hospital or clinic at the same time their mothers did. Children born with low birth weights and physical problems have been classified as potentially high risk infants. So classified, there are 47 high risk children (20%) in the CFRP group. High risk status of focal children will be reexamined when birth data can be verified through State Bureaus of Vital Statistics.

A rather high percentage of children (24%) were born with physical problems, according to mothers' reports, and some children (5%) had multiple problems. Table 4-6 provides information about the types of physical problems both groups of focal children were born with. No significant differences were found between the groups.

Table 4-6

Physical Problems at Birth
(percent)

	CFRP	Non-CFRP
	N=48	N=41
Birth defect	21.3	12.4
Respiratory ailment	9.2	9.2
Jaundice	5.7	15.9
Trauma	4.6	1.1
Blood group incompatibiity	1.1	0
Infection	1.1	3.4
Other/unspecified problem	39.5	36.6

At the time of the spring interview, 12 percent of the CFRP mothers reported that they had been pregnant in the six months since the fall interview. As the spring interview did not focus on prenatal care, however, it is not possible to assess the program's impact on the quality of this type of care in the six months after families entered the program. This will be investigated in future interviews.

No statistically significant differences were detected among CFRP groups across the six sites; families in all these programs appear to have had comparable prenatal care and birth circumstances. No group differences were evident at any of the sites.

Child Health

The mean birth weight of focal children was 7.0 pounds (S.D.=1.4). Modal and median weight were the same as the mean. Infants' weights at birth ranged from a low of 1.1 pounds to a high of 10.3 pounds. At the time of the baseline interview, mothers were asked to rate the appropriateness of the baby's current weight. Most CFRP mothers felt that the child's weight was about right (75%); 11 percent of the children were considered too light and 15 percent too heavy.

Information about focal children's height and weight was collected in the spring through parental reports, both as an indirect assessment of physical growth and to determine possible height and weight differences between the treatment and non-treatment groups. Height, and to a lesser extent weight, are considered to be general indicators of physical growth. Large discrepancies from national norms may be related to the nutritional status of study children.

In the spring, focal children weighed an average of 22.6 pounds (S.D.=4.3); individual weights ranged from 11.5 pounds to 38.0 pounds. For the 72 focal children for whom height data were available, average height was 28.4 inches (S.D.=4.2). Twenty-four percent of mothers did not know their child's weight, and 62 percent did not know their child's height.

No statistically significant differences were detected between the CFRP group and the control/comparison group on weight and height measures adjusted for age of the focal child. Weight data for focal children in both groups can be compared to national norms for both boys and girls; data are presented in graph form (Figures 4.1 and 4.2). A similar comparison for height data is not made here because the number of cases is too small (72) to present a meaningful picture.*

What have been the frequency of and occasions for visits to doctors for these children? According to mothers' reports in the fall, focal children (average age at that time 4.1 months) had been to the doctor an average of 5 times (S.D.=4.7). The mode and median were somewhat lower than the mean (3 and 4.3 respectively). At the time of the fall interview, only a small proportion of children (6%) were reported not to have seen a doctor since birth.

This was the case for even fewer children (4%) during the fall to spring period. In the six months since families entered the CFRP, they had taken the focal child to the doctor an average of 4.2 times (S.D.=3.2). No differences were detected between the CFRP and control/comparison groups in fall and spring in within-site comparisons, nor were across-site differences in the number of visits apparent at either timepoint.

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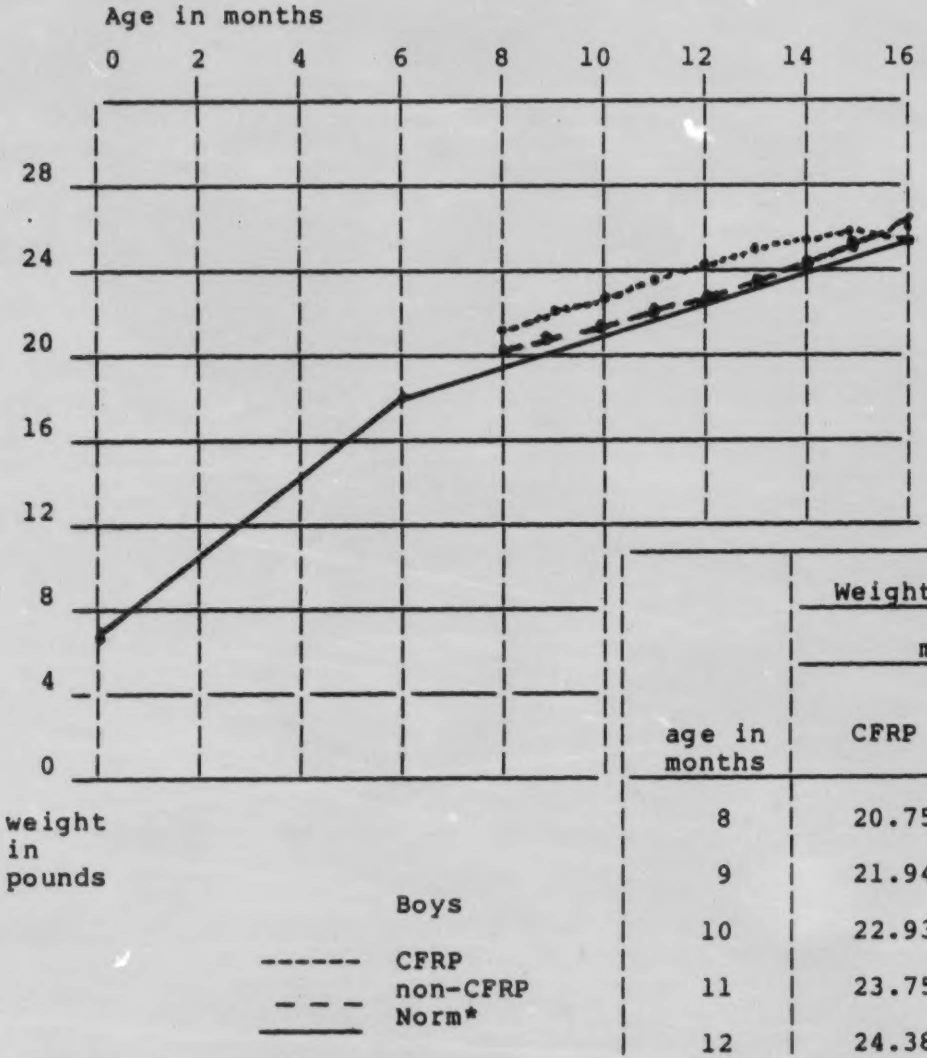
*Alternative methods for collecting and analyzing height data should be reviewed for subsequent phases of this evaluation.

Figure 4-1



age in months	Weight in Pounds** males CFRP	Weight in Pounds** males Control
8	20.75	20.56
9	21.94	21.15
10	22.93	21.75
11	23.75	22.37
12	24.38	23.00
13	24.81	23.63
14	25.05	24.28
15	25.11	24.95
16	24.97	25.59

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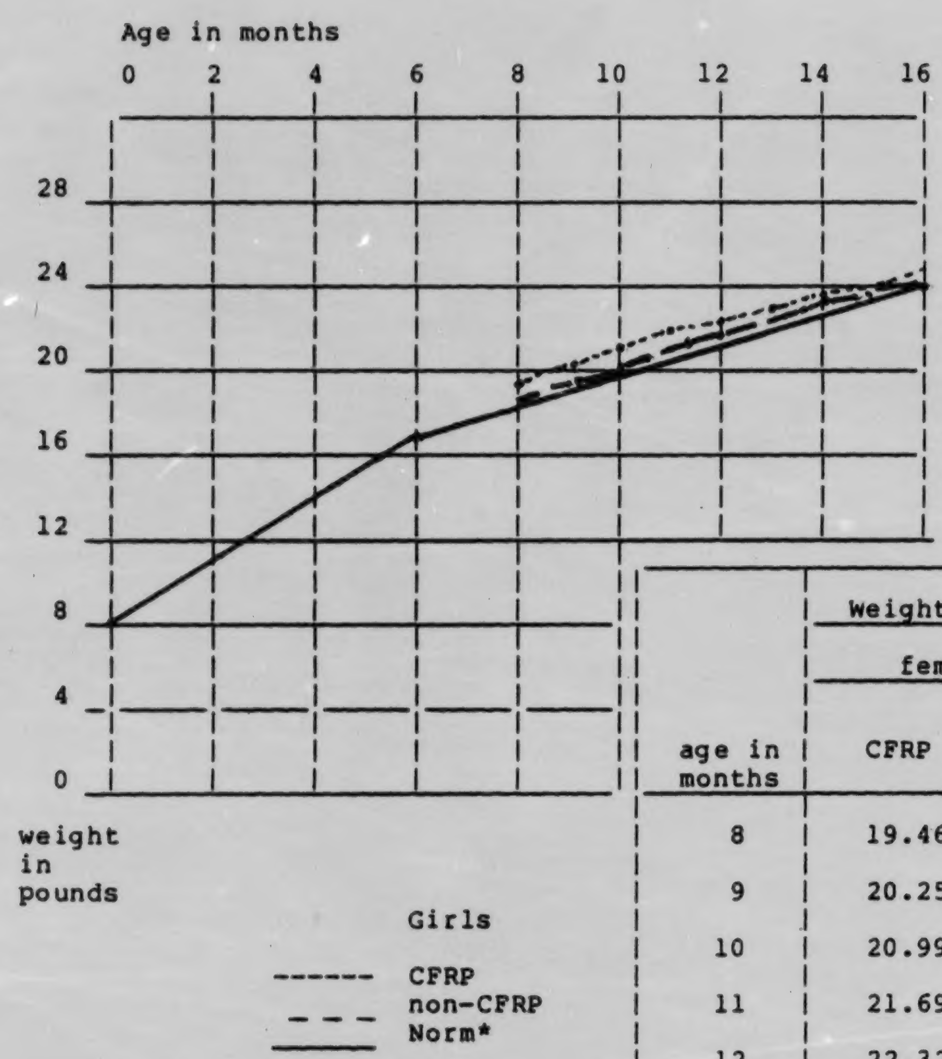
*From State University of Iowa, Department of Pediatrics.

**Sample estimates for focal children's weight at particular ages were generated from regressions of weight on age (at weighing) and age squared, in order to approximate the functional form of the normed curve within this age range.

Figure 4-2



	Weight in Pounds **	
	females	
age in months	CFRP	Control
8	19.46	18.58
9	20.25	19.42
10	20.99	20.22
11	21.69	20.99
12	22.32	21.70
13	22.90	22.37
14	23.43	23.00
15	23.90	23.58
16	24.31	24.12

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*From State University of Iowa, Department of Pediatrics.

**Sample estimates for focal children's weight at particular ages were generated from regressions of weight on age (at weighing) and age squared, in order to approximate the functional form of the normed curve within this age range.

Mothers were also asked why they took the focal child to the doctor. In the fall, they gave two different reasons on the average (S.D.=1.1). The number of infant doctor visits remained unchanged from fall to spring and did not differ across sites. In comparing the CFRP and control/comparison groups, no significant differences were detected in the number of doctor visits or reasons for these visits at any of the six sites in either fall or spring.

Although mothers specified reasons for infant doctor visits, the data are not reported here, since they are based on open-ended questions and provide a misleading picture concerning checkups and immunizations that focal children received. In the next wave of data collection, questions concerning health care of children will be modified so that we can determine the length of time since the last doctor visit and medical checkup and compare these data against a schedule recommended by the American Academy of Pediatrics (AAP) as a sound program of preventive health care for children in this age group. Similar data will be obtained concerning immunizations. Dental care will be explored when children reach age three; this is the time the AAP recommends for the child's initial dental exam.*

Mothers were asked about their comfort with the health status of the child. Sixty-five percent indicated that they were "very comfortable" with the child's health. A higher proportion of New Haven parents (86%) were very comfortable with the child's health status than at other sites; this was the case for only 48 percent of Salem mothers. Across-site differences were not statistically significant, however. No group differences were detected between the CFRP and comparison groups at any of the sites.

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*"Recommendation for Preventive Health Care of Children and Youth," Committee on Standards of Health Care, American Academy of Pediatrics; June 1974.

Finally, mothers were queried about the health of the focal child's older siblings, if any. In the fall, older siblings had been taken to the doctor an average of 3.0 times (S.D.=4.6) in the six months prior to the interview. Thirty percent of the older children had not seen a doctor at all during that period. Fewer visits to doctors by older children were reported between fall and spring ($\bar{x}$=.26; S.D.=1.5). Twenty-four percent were reported to have serious continuous health problems. No group differences were detected on older children's health status measures at either fall or spring between the CFRP and control/comparison group at any of the six sites, nor were across-site differences evident at either time point.

In summary, there is no evidence that CFRP had an impact on children's health status in the first six months. Differences may emerge with time, however, as a result of health education offered by CFRP and its emphasis on preventive health care.

Maternal Health

In addition to obtaining prenatal care, about half of the CFRP mothers (43.8%) reported having been to a doctor for reasons such as illness in the six months preceding the fall interview. Twenty-four percent of the mothers indicated in the fall that they have serious continuous health problems. Severity of these problems, however, cannot be assessed from mothers' reports. Maternal health problems were uncorrelated with focal child health problems. Data on the types of health problems of mothers were obtained in spring, and are summarized in Table 4-7.

Table 4-7

Health Care Problems of Mothers

	CFRP percent N=49	Non-CFRP percent N=33
Neuromuscular disorder	10	9
Digestive disorder	20	21
Dermatological problem	2	0
Sensory disturbance	8	3
Neurological disorder	10	9
Respiratory illness	33	30
Circulatory problem	18	18
Reproductive disorder	8	18

In spring, 9 percent of the CFRP mothers reported that they had been ill since the fall interview; 46 percent had been to the doctor in the past six months. Doctor visits by mothers averaged 1.1 (S.D.=2.0). Group differences were detected in the fall in New Haven; comparison mothers had been to the doctor more frequently than mothers in CFRP ($p=.04$). In the spring, mothers in both groups in New Haven, as well as at the other five sites, had been to the doctor a comparable number of times. No group differences were detected in proportion of mothers with serious health problems or in the types of problems they have.

Health Care

One of the goals of CFRP is to ensure that health care needs of families are met. This is usually done through referral to health care agencies or other medical personnel in the community. A wide range of medical facilities are used by CFRP mothers to meet the health needs of family members. In fall, they reported using an average of 2.6 different health facilities (S.D.=1.4). Very few CFRP families (17%) reported using only one facility to meet their health care needs.

CFRP families reported using an average of 1.8 different types of health care facilities (S.D.=0.8). The majority of the families receive health care at local clinics (62.7%) or go to a private physician (56.8%) for their health care needs. The types of health care facilities that are used by CFRP families, however, were not the same at all six sites, as is noted in Table 4-8.

Table 4-8

Types of Health Care Facilities Used
(percent of CFRP families)
(Fall)

	Jackson	Las Vegas	New Haven	Okla-homa City	St. Peters-burg	Salem	Over-all
	N=40	N=42	N=36	N=39	N=40	N=39	N=236
Clinics	27.5	52.4	66.7	74.4	87.5	69.2	62.7
Doctors	90.0	88.1	30.6	23.1	52.5	51.3	56.8
Hospitals	5.0	14.3	41.7	46.2	37.5	25.6	28.0
Dentists	47.5	42.9	8.3	15.4	17.5	33.3	28.0
Other	17.5	2.4	5.6	2.6	5.0	12.8	7.6

For all types of health care facilities except the "other" category, across-site differences were found in the proportion of families who use these facilities to meet their health care needs ($p<.01$). No differences were detected in the fall, however, between the CFRP and control/comparison group on any of these variables.

Over two-thirds of the CFRP families at four sites (New Haven, Oklahoma City, St. Petersburg, and Salem) reported use of health care clinics. The high usage of clinics in St. Petersburg (88%) may be accounted for by the fact that the majority of families were referred for the study by the Pinellas County Health Department, which provides direct health care by way of clinics. The heavy reliance on clinics at this site is probably the direct result of the difficulty low-income families experience in obtaining health care from private physicians, which has made the County Health Department one of the few health care resources available for this population. In Oklahoma City, a large proportion of the families go to the Mary Mahoney Clinic, which provides comprehensive health care in the area served by the CFR program; in New Haven, similar clinics are operated by Yale University. At these three sites (St. Petersburg, Oklahoma City, and New Haven), a fairly high proportion of the families also report using hospitals for their health care needs. Use of clinics was considerably lower in Jackson and Las Vegas. At these sites, almost all families reported using private physicians to meet their health care needs, while this type of medical care was less common at the other four CFRP sites.

Dentists were reported as being used by only 28 percent of the CFRP families. This ranged from a high of 48 percent in Jackson to a low of only 8 percent in New Haven. It is difficult to draw any conclusions from these data, since it is conceivable that some families receive dental care at comprehensive health care clinics. The use of such clinics and the services they offer must be explored more fully in subsequent site visits and parent interviews.

In the spring, families were asked if they had been in contact with and visited different health care facilities in the past six months from those reported earlier. (No data were obtained, however, to indicate whether CFRP referred families to these agencies or helped them gain access to these services.) Thirty percent of the CFRP families indicated that they had, although this varied across sites (p=.05).* Use of new health care facilities was highest in Las Vegas (41%), Salem (39%), and Jackson (38%), and lowest in New Haven (7%). Table 4-9 shows the types of new health care facilities used by CFRP families at each of the six sites.

Table 4-9

New Health Care Facilities Used
(percent of CFRP families)

(Spring)

	Jackson	Las Vegas	New Haven	Oklahoma City	St. Petersburg	Salem	Overall
	N=20	N=28	N=3	N=16	N=17	N=25	N=109
Clinics	45	25	0	44	18	72	40
Doctors	45	61	33	44	65	24	47
Hospitals	5	14	100	25	18	4	15
Dentists	25	18	0	6	12	4	13

The majority of families who had been in contact with new health care facilities had received medical care from private physicians (47%) or clinics (40%). A smaller proportion of the families had been in contact with a new hospital or dentist. Site differences were significant (p<.01) for both clinics and hospitals. With the exception of dental care at one site, no significant differences were detected between the CFRP and control/comparison groups on the utilization of new health care facilities. In Las Vegas, a significantly higher proportion of families in the control/comparison group had been in touch with new dentists in the past six months than was the case for the CFRP group (p=.08).

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*single t-test p-value

These data must be interpreted with caution, since they do not address issues of quality of care. It would be misleading to conclude from these data, for example, that CFRP did not have a positive impact on health care utilization of families enrolled in the program. While families in both groups use the same types of health care facilities, the care itself may be of different quality for families in CFRP due to program intervention. Families may experience fewer hassles getting their health care needs met because of program referrals or increased sensitivity on the part of health care professionals to health care needs of low-income families. Quality of care is difficult to assess, however, through parent interviews. During the course of spring 1980 site visits, we propose to meet with officials at several health care facilities frequently used by families in both groups. These interviews will provide data concerning the types of services provided at the facilities, contacts made by CFRP staff on behalf of families, sharing of health care records, and perceptions of health care officials about changes in quality of care that resulted from meetings with CFRP staff and other types of CFRP program intervention.

CFRP is expected to help families get easier access to health care through referrals and interface with agencies. In the fall, about one-fifth (19%) of the families indicated that it is difficult for them to obtain health care services; this did not differ by group. Whether CFRP families perceive less difficulty in obtaining health care as a result of their participation in the program will be examined in subsequent interviews. At this point, the single positive indication is that in St. Petersburg, but only at that site, mothers who had received CFRP health referrals were more likely than other mothers to have visited a doctor during the period from fall to spring.

In the fall, most families in CFRP (85%) reported that they had some type of medical insurance to help pay for health care. Almost all (77%) were enrolled in Medicaid. While the proportion of families with medical insurance remained unchanged from fall to spring, there was a slight increase in the use of Medicaid, from 77 to 82 percent. In the fall, there were site differences on medical insurance ($p<.01$) and Medicaid ($p=.04$). Las Vegas, with 97 percent of the families enrolled in some type of medical plan, ranked highest, and Salem lowest, with only 61 percent insured. Of the insured CFRP families in St. Petersburg all were enrolled in Medicaid, but this was the case for only 67 percent of families in Oklahoma City. There is no evidence of program impact in terms of utilization of health care facilities and enrollment in health insurance, since it is the same for both the CFRP and control/comparison groups at each of the six sites.

Summary

From the data we examined, there is no evidence of an impact of the CFR program on maternal and child health. That is, the CFRP and control/comparison families within each site do not differ on prenatal care and birth circumstances, child health, maternal health, or their pattern of use of health care facilities. Some additional information on health status needs to be collected in future months (e.g., birth weight from hospital sources, immunization records), but at the moment it appears that the CFRP does not have significant short-term impacts on family health.

4.3 Parent-Child Interaction

One of the primary goals of CFRP is to "enhance and build upon the strengths of the individual family as a child rearing system." Through home visits, infant-toddler sessions, and parent meetings, the CFR program hopes to influence interactions between parent and child and, by doing so, to have a positive impact on the child's development. Parent-child interaction is also emphasized in the Head Start and preschool-school linkage components of CFRP. A major thrust of the program is to assist parents in promoting the total development of their children and in strengthening their parenting skills.

In this evaluation, program impact on parents is measured in the following areas:

- parental knowledge of child development and individual needs of children;
- parental affect toward the child; and
- the quality and quantity of parent-child interactions.

CFRP is further expected to influence the attitudes towards school and relationships with the school of parents with older children. Other studies have repeatedly shown that parent attitudes and expectations are related not only to the child's motivation to succeed in school, but also to his/her actual achievement (Rosen and D'Andrade, 1959; Bing, 1963).

This section presents information about parent-child interaction gathered during the first six months of the evaluation. In the fall, mothers were asked several questions about the temperament of the focal child. In the spring, they were asked about the child's behavior in a number of commonly occurring situations. (The questions were based on items developed by Chess and Thomas, 1963; Carey, 1972; and Broussard, 1972.) Since these data on infant temperament and behavior are in the form of mothers' reports, and are not based on direct measurement, they are not viewed as child outcomes; rather, they are seen as reflecting parent response to and level of comfort with the demands of caring for an infant. After these data are reviewed, the discussion turns to a series of questions in fall and spring that addressed the issue of parent comfort more directly.

Next, the section discusses questions concerning parent-child interaction *per se*. Again, these data are based on reports by parents rather than on direct assessment. [However, in the spring, parent-child interaction was observed in the homes of a total of 32 families located at two of the six CFRP sites as part of a pilot study. An observation system known as TIES (Toddler and Infant Experiences) and developed by Dr. Jean Carew of Research for Children Inc. was used in the pilot study; results are presented in Appendix E.] Included in the discussion of parent-child interaction is the issue of the parent's relationship with the child's school--for families with older children. Finally, parents' expectations regarding their children's educational achievements are reviewed.

Infant Temperament

As part of the baseline interview, parents were asked five questions about the temperament of the focal infant. The first two items concerned the regularity or predictability of the baby's sleeping and eating patterns (Table 4-10). Parents felt children were fairly predictable in each of these areas.

Table 4-10

CFRP Infant Sleeping and Eating Schedule
(Fall)

	N	Mean*	S.D.
Predictability of baby's hunger	236	3.54	1.50
Regularity of baby's sleeping pattern	236	3.55	1.50

---

*Means are based on a five-point scale, with a high score indicating regularity or predictability and a low score irregularity or unpredictability.

The next three questions focused on the baby's mood in interactions with others in the family, (e.g., while the child is eating or being diapered and dressed) and the level of attention that the baby needs (Table 4-11). Again, parents responded fairly positively. (Since correlations between scores on these items were extremely low, the individual items as asked were retained in the analysis rather than being clustered.) No significant across-site or group differences were detected on infant temperament questions in this initial testing.

Table 4-11

CFRP Infant Temperament
(Fall)

	N	Mean	S.D.
Baby's mood while eating[a]	236	3.53	1.50
Baby's mood while being[a] dressed or diapered	235	3.56	1.50
Level of attention[b] needed	236	3.19	.83

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[a] Items scaled: (1) very fussy; (2) somewhat fussy; (3) neither fussy nor happy; (4) somewhat happy; (5) very happy.

[b] Item scaled: (1) none of the time; (2) a little of the time; (3) some of the time; (4) most of the time; (5) all of the time.

In the spring, rather than being asked to rate infant temperament, parents were given a list of 12 problem situations reflecting typical stages of a child's development and asked to indicate whether they occur rarely, never, sometimes, or often. Two constructs were developed from data reduction analyses. Construct 1 consists of four items concerning problems with the child's health, eating, and sleeping habits, and being an extremely active child who gets into everything. The second construct contains six items: (1) difficulties comforting or settling the child; (2) the child's interest in his/her environment and attentiveness to other people in the family; (3) inability to play alone; (4) acting up around people; (5) inability to share things with other children; and (6) discipline problems. The remaining two items were omitted from analyses. The first of these--problems with toilet training--was considered inappropriate for a large proportion of the children due to their age. A question concerning sibling rivalry was excluded due to a high incidence of missing data; over half of the focal children (55%) had no siblings.

Spring data on the frequency of occurrence of these constructs are summarized in Table 4-12.

Table 4-12
Occurrence of Problem Situations (CFRP)
(Spring)

	N	Mean*	S.D.
Construct 1	188	2.13	.63
Construct 2	179	2.27	.60

---

*Each construct was scaled from (1) never to (4) often; see Appendix F for details.

The data indicate that problem situations occur relatively rarely. When parents were asked which situations concerned them the most, they most frequently mentioned health problems, the child getting into things and being active, and the child's inability to share with other children. No significant across-site or group differences were detected on either the infant temperament items (fall) or the child development constructs (spring).

Parent Comfort

There is clearly a relationship between the child's temperament and the occurrence of problem situations on the one hand and how comfortable the parent feels with the child on the other. A fussy child is likely to make mothers more uncomfortable than a happy or "easy" one. In the fall, parents were asked directly about their comfort with various aspects of the child's schedule, behavior, and overall disposition on a five-point scale. High values indicate feeling more comfortable with child behaviors and low values indicate low comfort level. Items in the fall parent comfort scale correlated highly and were combined into one construct. Mean parent comfort in the fall was rated as 3.57, with a standard deviation of .94, indicating parents felt comfortable to very comfortable with the child. Significant across-site differences were detected on this measure ($p<.01$). Parents in Salem and St. Petersburg felt considerably more comfortable with the child than those at other sites; mean ratings at these sites were 4.10 (Salem) and 3.81 (St. Petersburg). Analyses of parent comfort also show significant differences among the four different types of families ($p=.03$). Mothers in extended family situations reported they were less comfortable ($\bar{x}=3.3$; S.D.=0.88) than in other family types. In part, this may be due to the younger than average age of mothers in extended families, as well as the fact that many of them are first-time mothers.

At two sites--Oklahoma City and Salem--differences were detected on the parent comfort scale ratings between the CFRP and control/comparison groups. These differences are noted in Table 4-13.

Table 4-13

Group Differences in Parent Comfort (Fall)

	CFRP			Control/Comparison				
	N	Mean	S.D.	N	Mean	S.D.	F	p
Oklahoma	39	3.28	.91	47	3.62	.86	3.07	.08
Salem	39	4.10	.93	51	3.61	1.01	5.65	.02

In Oklahoma City, CFRP ratings were lower than for the control/comparison group. The reverse was the case in Salem.

In the spring, parents were asked a different set of questions about their comfort with the child. They focused on comfort with being a mother, the baby's personality, quieting and comforting the baby, the baby's reaction to separation, eating and sleeping habits, the child's energy and need for attention, obedience, and health. In addition, parents gave a general rating indicating whether the child is an "easy" or "difficult" child. Eight of the ten items combine for a general comfort measure; feelings about the child's reaction to separation from the mother and feelings about the child's health were retained as separate measures. Spring comfort ratings are presented in Table 4-14.

Table 4-14

CFRP Parent Comfort (Spring)

	N	Mean	S.D.
Comfort construct[a]	186	.63	.24
Separation[b]	187	3.19	1.43
Health[a]	188	.65	.48

---

[a] The comfort and health items were scaled: (1) very comfortable, or easy; (0) all else. Means reflect proportion of mothers who answered "very comfortable" to all of the comfort items.

[b] Scaled: (1) very uncomfortable; (2) uncomfortable; (3) neither; (4) comfortable; and (5) very comfortable.

Analyses of covariance were conducted on four spring infant temperament and parent comfort measures: the two "problem situation" constructs and the comfort construct discussed above, and the item soliciting mother's comfort with the child's reaction to separation. These analyses were undertaken within each site; covariates differed both by site and by variable. No significant CFRP effects on the temperament measures were found. On the comfort tests, however, two significant results stand out. The results are summarized in Table 4-15. Evidently, CFRP in New Haven has a positive effect on mothers' comfort with their infants' reactions to separation, while in Oklahoma CFRP seems to be responsible for higher scores on the comfort construct.

Parent-Child Interaction

As noted earlier, only a limited amount of data were obtained on parent-child interaction in fall and spring parent interviews. In the fall, mothers described ways they comfort the baby and what their interactions with older children are like, but did not discuss the quality or quantity of these interactions. Data on the latter are obtained through the TIES observation pilot study, which may be adopted as one of the principal evaluation mechanisms in subsequent phases of this study.

Most CFRP mothers (95%), when asked in the fall whether the child could generally be comforted if still fussy after being fed or changed, responded affirmatively. Rocking and cuddling the baby was reported to work best by the majority of the mothers (56%). Another approach used by numerous mothers was to give the child a toy and play with him/her (21%), and talking or singing to the

Table 4-15

Summary of ANCOVA Results:
Parent Comfort after Six Months in CFRP

	Comfort Construct			Reaction to Separation		
	Effect[a]	Standard Error	p[b]	Effect[a]	Standard Error	p[b]
Jackson	.005	.062	NS	-.203	.407	NS
Las Vegas	.020	.054	NS	.463	.389	NS
New Haven[c]	.132	.093	NS	1.117	.370	<.01
Oklahoma[d]	.127	.056	<.06	.442	.328	NS
St. Petersburg	.019	.052	NS	.486	.316	NS
Salem	-.035	.051	NS	.271	.367	NS

---

[a] Effect sizes are partial regression coefficients, controlling for covariates in the ANCOVA. All covariates controlled, CFRP participation (on average) yields the given "effect" on the comfort scale scores.

[b] Significance levels are taken simultaneously across four tests, two comfort and two temperament ANCOVAs, within each site.

[c] Covariates included in the reaction-to-separation ANCOVA in New Haven included three dichotomous indicators as of the fall 1978 parent interview (note that there are 39 degrees of freedom for the CFRP test):

- mother finished high school (greater comfort);
- mother sees friends fairly frequently (greater comfort);
- mother has problems obtaining public services such as police and fire protection (less comfort).

[d] Covariates included in the comfort construct ANCOVA in Oklahoma included the following fall 1978 measures (note that there are 52 degrees of freedom for testing the CFRP effect):

- mother has difficulty arranging child care (less comfort
- comfort construct (positively related);
- per capita income (positively related).

child (18%). Few parents felt that leaving the child alone (3%) or swinging/walking the child (5%) was effective in dealing with their fussy baby. These data appear to imply that mothers favor "nurturing" of the child, an aspect of positive parent-child interaction. The frequency with which this occurs or the quality of nurturing, of course, cannot be assumed without observing interactions between mother and child. Compared with other sites, a significantly smaller proportion of New Haven parents (88%) reported that they can comfort the baby when he/she is fussy ($\underline{p}<.01$).

Child interaction with adult males was reported in the fall to occur in almost every CFRP home (92%). To a question on how important such interaction is, on a scale of 1-4 (with 4 representing very important and 1 very unimportant), parents gave a mean response of 1.8 (S.D.=0.9). Mothers with male focal children rated adult male-child interaction the same as those with girls. No significant group differences were detected in terms of parent attitudes about adult male-child interaction. In over half of the CFRP homes (58%), the adult male who interacts with the child is the father, stepfather, or boyfriend who is viewed as a surrogate father. The male figure in 21 percent of the families is an uncle, and in 3 percent the grandfather.

Only 16 CFRP families had children currently in a preschool program; 43 had children in school. In both fall and spring, parents were asked to talk briefly about their contacts with their children's preschools and schools. The results are summarized in Table 4-16.

Table 4-16

Interactions with Preschool or School (percent of CFRP families)

(Fall)

	Preschool	School
Number in preschool or school	16	43
Contact with school in past year (%)	81.3	76.7
Meeting at school about particular concern (%)	56.3	67.4

In the six months preceding the spring interview, the proportion of mothers who had been in contact with a school or preschool was about the same as in the fall (79% and 89% respectively). Over half of the parents with children in school had attended a PTA or school meeting (56%) or had met with school personnel to discuss the child's general progress (52%). A higher proportion of parents (89%) with children enrolled in a preschool center had checked on the child's progress, although only about one-third (36%) had attended parent meetings. Over three-fourths of the mothers had visited the child's classroom in the past six months--76 percent of mothers with children in school and 81 percent of mothers with preschool children. Involvement with school or preschool is essentially the same across all sites as well as between groups. This lack of group differences may be due to small sample sizes at each site.

In the spring, over half (58%) of the 84 mothers with children older than the focal infant indicated that they have concerns about these older children. Parents expressed 3.1 concerns on the average (S.D.=5.3). Almost all mothers had talked about their concerns with someone--

relatives or friends or a professional. The proportion of mothers who had been in touch with a professional was the same for the CFRP and control/comparison group and did not differ significantly across sites.

Parent Expectations

In addition to obtaining data about parent-child interaction and parent involvement with schools or preschool centers, parents were asked about their aspirations for the education of their infants and older children. In the fall, a high proportion of mothers (41%) indicated that they wanted their infants to finish college. Aspirations for the educational achievement of older children were somewhat lower.

In response to questions about aspirations for the focal infant, 84 percent of the mothers discussed how they planned to help the child achieve those goals. Most had specific ideas (40%) or planned to provide the child with the necessary encouragement (37%). Eighteen percent of the families had no plan; 5 percent indicated that they planned no action because they believe that children should not be pushed. No site or group differences in expectations were observed.

Summary

In the four areas of parent-child interaction introduced in this section, some show significant CFRP vs. comparison/control group differences. Measures of infant temperament, particular parent-child interactions, and parental expectations for their children did not show clear impacts from the CFR program. CFRP effects were detected on measures of parent comfort with the child's behavior at two sites--New Haven and Oklahoma City. Further data-gathering efforts using observation techniques to describe actual parent-child interactions will allow for more intensive examination of this outcome domain.

4.4 Capacity for Independence

CFRP was designed not just to provide services and child development education to enrolled parents, but to act in general as a family support program. CFRP staff consistently interpret this mandate, implicit in the CFRP guidelines, to mean that they should help parents to identify goals for themselves and their families concerning: immediate survival needs; more long-term desires for personal activities, family relationships, and economic capacity; and use of available services or resources. CFRP staff believe that they should help families to identify and realize such goals for themselves as a means toward coping with needs and situations which are common to all families and which may be particularly problematic for families with limited incomes.

CFRP guidelines are deliberately broad and very general. Not surprisingly, CFRP staff vary in what they believe "coping" means. To some, it means the parent's ability to manage the stress of living circumstances associated with poverty; to others, it means handling the burdens of caring for young children and trying to help support the family; to still others, it refers to a general ability to anticipate family needs and manage the home environment in a relatively organized, consistent manner.

A common assumption underlying the CFRP guidelines is that parents should be able to select and use support from family and social groups (informal resources) as well as from professionals and agencies (formal resources) without becoming dependent on formal supports--including CFRP--for continued functioning of the family. In other words, the CRFP mandate is aimed at broad support of the family during a particular period; the program is not intended to be a substitute for relationships or services that exist more naturally within the family's social and community environment.

The domain of capacity for independence, then, consists of two conceptually related sets of variables: (1) parent coping and (2) use of supports (both informal and formal resources). Previous research on coping, while not focusing specifically on low-income families, has identified several variables that are similar to those of interest in this study, including family circumstances and parental attitudes. This research also provides useful notions about which sets of variables may be important in the study of coping among CFRP and non-CFRP families. There is converging evidence that: coping behavior appears different in different situations; individuals' attitudes and motivations toward situations and their perceptions of control affect their ability to cope and their manner of coping with particular situations; and characteristic coping responses may be cognitive (recognition or nonrecognition of situations), behavioral (direct action), or decisional (use of choice among alternative resources or behaviors). However, the research on coping lacks a well-defined and tested theoretical basis. Few studies have defined "effective" coping, except in the most descriptive or general terms, nor is there agreement about the direction of effects in the relationships among sets of important variables.

The use of formal (professional and agency) supports has been related to a variety of effects in other evaluation studies of programs like CFRP--such as Parent Child Development Centers, Parent Child Centers, Home Start, the Brookline Early Education Project, the Family Development Research Project, and others (Robinson, 1975; Holmes, 1975; Abt Associates, 1976; Hewett et al., 1977; Pierson, 1974; Lally and Honig, 1977; and Kessen and Fein, 1976). All these evaluations have pointed to the importance of providing support services in addition to parent education, but few of them have shown dramatic changes in the use of formal support services associated with program participation, and most have not addressed the issue of what is "optimal" use of institutional resources. Further, few have addressed the issue of how the use of formal supports is related to other variables, such as the availability and use of informal (family and social group) supports (Weiss, 1979). The literature of family sociology does provide a good deal of evidence that contacts with family and social networks differ among groups and social classes (e.g., Bott, 1966; Nobles, 1977; Lein, 1977).

Little is known about the long-term effects of a family support program such as CFRP on the functioning of the family as a child-rearing system (in terms of parent coping and use of supports). Variables in this domain can serve as simple outcome measures or as mediating variables helping to explain outcomes in other domains. The approach employed here is to define and examine each set as simple outcomes, relative to CFRP participation. In subsequent analyses relationships among variables will be explored more thoroughly, and causal models will be developed for testing hypotheses.

Parent Coping

In this set of variables there are two subsets: situations which parents may find problematic in managing their everyday family affairs, and attitudes which may be important in determining coping responses to the situations identified.

Situations

Situations requiring some effort or coping response were classified in two general categories:

- problematic situations; and
- everyday relationships which cause a feeling of being "hassled."

In the fall interview, parents were presented with eight potentially problematic situations and asked how frequently they had experienced difficulty in these areas. The situations were (1) arranging for child care, (2) arranging for housing, (3) getting home repairs made, (4) obtaining a job, (5) getting food or clothing, (6) paying bills, (7) arranging for transportation, and (8) obtaining public services such as fire or police protection or utility service. All items except #6 (paying bills) employed a two-point scale, with "0" indicating the situation was never a problem and "1" that it was a problem at least occasionally. On item #6, "0" reflects never or occasional responses, while "1" indicates that there was a problem in this area at least monthly.

Table 4-17 provides information on the frequency with which these situations presented problems for the CFRP families.

Table 4-17
Problematic Situations
(CFRP)

	N	Mean
Child care	233	.52
Housing	233	.47
Home repairs	234	.51
Getting a job	234	.43
Getting food or clothing	233	.54
Paying bills	232	.57
Getting transportation	234	.53
Public services	233	.10

CFRP mothers felt most frequently hassled about things that cost money (paying bills, getting food or clothing, and home repairs), and about arranging for transportation and child care. They were least likely to feel hassled about obtaining public services or protection. Across-site differences were detected on the food or clothing variable ($p<.01$) but not on the other seven situations. Obtaining food or clothing showed up more frequently in St. Petersburg ($\bar{x}=.72$), Salem ($\bar{x}=.67$), and New Haven ($\bar{x}=.64$), and less frequently in Jackson ($\bar{x}=.38$) and Las Vegas ($\bar{x}=.40$).

Mothers in different types of family situations do not all appear to face the same types of problematic situations. Analyses by family type showed significant differences on two of the situations: child care and transportation ($p=.08$). These situations are more frequently problematic for single-parent families who live with no other adults than for other types of families. Child care problems were mentioned infrequently by mothers in extended family situations; transportation, on the other hand, was a problem only for a small proportion of two-parent families.

Finally, a measure of general tendency to feel hassled about a variety of everyday relationships with family, friends, neighbors, service providers, and others was obtained. One construct was developed from a range of items representing "frequency of feeling hassled" (see Appendix F). In general, the items that composed this measure were scored "0" for never or "1" for all else; the exception was relationships with family, which was scored "0" for never or occasionally and "1" for all else. The construct score was the average of the scores on five relationship categories. Overall mean score on the construct was 0.49 (S.D.=0.32); there were no significant site or group differences.

Attitudes

The spring interview contained two sets of items which asked parents to indicate how frequently in the past six months they had been "worried about" or "had to deal with" and (separately) how often they "felt positive or pleased" about the following everyday situations or relationships: school or training; marriage or relationship with another person; financial situation; being a parent; relationship with family; home or neighborhood; outside job; job as homemaker (managing the home).

These items are treated as an attitude measure rather than a situation measure, in that they were intended to provide a general indication of the emotional valence of the mother toward these roles, situations, and relationships. Mothers were asked to indicate positive or pleased feelings because these emotions, as well as worried feelings, are likely to influence perception of situations as problematic or manageable, and, in turn, coping behavior. In addition, CFRP's emphasis is to build on strengths of families; therefore, it is important to have some indication, however indirect, of sources of reward within the family. Two constructs were developed from these two sets of items.* These represent frequency of pleasing reactions and frequency of worried reactions. Pleased responses were somewhat more frequent. Only 6 percent of all mothers reported rarely or never being pleased about all items; more than half (63%) reported being pleased often or sometimes about all items. It is certainly possible that these positive ratings reflect in part the social desirability of having positive rather than negative feelings. However, it seems equally possible that mothers often, certainly sometimes, find aspects of their family lives and roles pleasing.

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*Two situations, school and work, had high proportions of missing data and were excluded from the analysis.

There were no statistically significant differences between sites, or between groups within sites, on either of the two measures derived from the pleased/worried set of items. In New Haven the CFRP mothers did report somewhat more (or more frequent) worried reactions than control/comparison mothers, while Salem CFRP mothers reported slightly fewer (or less frequent) pleased reactions than their control/comparison counterparts.

Use of Informal and Formal Supports

Informal support is derived from relationships with family, friends, and social groups; formal support is obtained from agencies, health services, and professional or agency staff.

Availability and use of informal support was defined by four groups of variables:

- contacts with social groups;
- availability of help at birth, with baby and with older children;
- preference for help from family or friends (rather than from professionals); and
- likelihood of seeking advice from family or friends (rather than from professionals).

Contacts with social groups were represented by two constructs, one representing groups of parents at school, work, or church, and the other representing informal groups of friends. Availability of help included three items: whether the parent had someone she considered particularly helpful to her as a parent; whether someone helped with the baby; and whether someone helped with older children. The last two items referred to help on a daily basis, not to day care use.

Preference for help from informal rather than formal supports was asked in reference to particular situations such as emergencies, babysitting, counseling, and help with finances and housing. Parents were asked who they contacted in these situations, and responses were categorized as family, friend, or professional; a separate category was defined for those parents who identified "no one" as helpful in these situations. Finally, parents were asked who they were likely to seek advice from or question concerning their children, and responses were coded for family members, friends or other social contacts, or professionals. In general, variables representing use of informal supports are intended to provide information about the types of support already available and used by families in both study groups; as such, they may be used as covariables in later analyses of outcome. However, the balance between use and reliance on family and informal social groups versus professional and agency sources will be examined as an outcome of participation in CFRP.

There were no site or group differences on measures of use of informal support in the fall; Table 4-18 summarizes the data for CFRP families across all sites. In the spring, site differences emerged (p.=06) regarding involvement with social groups. Parents in Las Vegas ($\bar{x}$=.42), Jackson ($\bar{x}$=.40), Salem ($\bar{x}$=.39), and New Haven ($\bar{x}$=.38) reported more frequent contacts with social groups. No group differences were evident.

Table 4-18

Frequency of Social Contacts
(Fall)

	N	Mean	S.D.
Church or work groups[a]	220	.35	.25
Social groups[b]	234	.53	.41

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[a] Combined across four items, construct coded: (0) never; (1) all else.

[b] Averaged across two items, each coded: (0) never or occasionally; and (1) at least once per month.

Contact with informal sources of support (family and friends) for help in particular situations also revealed across-site differences in the spring. Jackson, Las Vegas, Salem, and St. Petersburg families showed similar proportions of families which had used such help (71%) while fewer Oklahoma City and New Haven families had used such help (53%). Overall, a similar proportion of families (71%) had contacted agencies for help with situations during the time between fall and spring, but no differences were detected across sites or across groups.

Analyses of covariance of four measures in the outcome domain of capacity for independence were explored: the constructs deriving from the series of questions concerning frequency of pleasing and frequency of worrisome situations, and the two indices of frequency of social contacts. None of the tests of CFRP impact were significant at the (simultaneous) .10 level. A number of intriguing results were noted, however. With one exception (in St. Petersburg), the direction of the CFRP effect is such that CFRP families score higher on the worrisome construct than do their control/comparison counterparts, other things being equal. [Hypothesis testing of the CFRP effects was directional, and these findings run counter to our hypothesized effects.] Furthermore, the single largest effect discovered shows CFRP families in Salem scoring lower, other things held constant, than control families on the pleasing construct ($p=.13$, jointly over four tests, two-tailed). While there are many possible explanations for these results (including that of sampling error, given the significance levels obtained), two possibilities suggest potential "hidden" CFRP benefits. One possibility is simply a reduction of social desirability response bias among the CFRP families--the possibility, in other words, that CFRP respondents are more honest. (The extent of such response bias in these data is unknown). Another related possibility is that of an increased sensitization of CFRP mothers to the realities of their current situations--decreased complacency with one's situation (rather than reduced response bias) could account for these results. These problems should be the focus of future data collection and analysis activities.

Use of formal supports and agencies was defined by four groups of variables similar to those used for informal support:

- use of clinics and hospitals versus private physicians;
- number of agency visits in past six months;
- preference for help from professionals (rather than from family or friends); and
- likelihood of seeking advice from professionals (rather than from friends and family).

No site differences were observed for using professionals rather than friends and family or for asking professionals for advice. There were significant site differences ($p<.01$) on the proportion of families who use clinics and hospitals versus private physicians. (See the discussion of this issue in Section 4.2 above, dealing with maternal and child health.)

Agency contact during the previous six months also differs significantly across sites, as shown in Table 4-19 ($p<.01$), though not across groups within sites. This difference probably reflects differences already noted in the proportion of families whose principal source of income is public assistance, and in the availability or proximity of such agencies by site as well. However, this will continue to be an important variable for tracking change over time at all sites.

Table 4-19

Contact with Social Service Agencies

(Fall)

Site	N	Percent of Families
Jackson	31	74
Las Vegas	34	78
New Haven	18	71
Oklahoma City	28	63
Salem	36	80
St. Petersburg	26	74

The pattern of agency contacts remained similar in spring, with significant differences among sites, but not across groups. Over half (57%) of all CFRP families had had at least one contact with an agency in the previous six months. The mean number of visits was 3.4, and the mode was one visit. Across-site comparisons showed that CFRP families in Las Vegas had the highest mean number of visits (6); Jackson, Salem, and New Haven had means of 3.4, 4.3, and 2.9 visits respectively: Oklahoma City and St. Petersburg had 1.6 visits or less. These across-site differences were statistically significant. No differences were evident, however, between the CFRP and non-CFRP groups at any of the sites. This suggests that families at each site face different types of problems or, alternatively, it may relate to differences in the availability of services.

Summary

Results in this outcome area mirror those discussed earlier. Some site differences existed in parent coping and in use of formal and informal supports, but no group differences were significant. Further research about capacity for independence will tell us if this outcome area is affected over the long term by the CFR program.

4.5 Conclusion

This chapter examined preliminary program impact in four outcome domains by comparing families in CFRP after six months of treatment with families in the control/ comparison group. As was pointed out in the summaries focusing on the outcome domains, there is little evidence yet that CFRP has a positive impact on the families served; it is reasonable to assume that families have been in the program for too short a period of time for such impact to become apparent. The lack of six-month findings also may be due to the highly individualized nature of the CFRP treatment, which may make it inappropriate to conduct group comparisons in all four outcome domains regardless of family need. As discussed in Chapter 3, CFRP staff report that progress is being made in the attainment of goals families have set for themselves; in fact, 48 percent of the families achieved one or more goals, while 41 percent were reported to have made some progress. Based on these staff reports, it is likely that program impact will emerge over time.

At this stage of the CFRP evaluation, it appears appropriate to undertake a careful review of the outcome measures that have been used to date to determine CFRP effectiveness and program impact on families. As was discussed in previous sections, several measures must be modified to ensure that useful data are obtained about the status of families, such as in the area of maternal and child health. We must focus our attention on preventive care and issues concerning the quality of health services families receive. In the area of parent-child interaction, it may be appropriate to continue with direct measurement, rather than relying solely on parent self-reports.

There are other means that can be used to strengthen the CFRP evaluation and our knowledge of program processes and their effectiveness in serving families with young children. Additional, more in-depth interviews with staff and families alike, reported in brief case study format, might provide new insights into how the program works, as well as concerning impacts that CFR programs are likely to have over the long range. This and other approaches must be carefully considered for use in the study's next phase.

Chapter Note: The analysis of covariance (ANCOVA) is a more powerful test of treatment effects in an experimental design than a simple t-test (or oneway analysis of variance, or ANOVA). Given sample sizes and a treatment effect, an analysis of covariance is more likely to detect that effect than is a simple analysis of variance. The key prerequisite is one or more covariates, or variables associated ("covarying") with the dependent variable of interest. In addition to the usual assumptions underlying an analysis of variance, an ANCOVA adds the assumption of "homogeneity of regression." Essentially, this presumes that the linear relationship between the covariate(s) and the dependent variable is the same within each of the experimental groups, excepting any shift in level (or in the regression intercept) due to the treatment(s).

Chapter 5

SUMMARY OF PRELIMINARY FINDINGS AND FUTURE STUDY ISSUES

The first section of this chapter provides a brief summary of the characteristics of the CFR program and preliminary findings from the first year of the evaluation. At the conclusion of this phase of the study, a careful review was conducted of various aspects of the evaluation. The purpose of this review was to use what was learned in the first year in looking for ways to strengthen the evaluation. These and related issues, including preliminary plans for the next phase of the study, are the focus of the concluding section of this chapter.

5.1 Summary of Preliminary Findings

An overview of CFRP is presented in Volume II of this report. It provides a comprehensive picture of the operations of the CFR program and a descriptive context for the statistical and analytic findings of other components of the study which are presented in the Research Report. Family enrollment at the six evaluation sites* is considerably higher than the 80 to 100 mandated in the CFR program guidelines. In fall 1978, enrollment averaged 128 families. By spring 1979, enrollment had increased by 15 percent to an average of 147 families per site. Demand for CFRP typically exceeds supply. Most CFRP families entered the program at a time when they had children of both infant-toddler and Head Start age, although this differed among sites. This could indicate that the Head Start and infant-toddler components of CFRP are being emphasized to different degrees at the six sites.

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*The evaluation sites are: Jackson, Michigan; Las Vegas, Nevada; New Haven, Connecticut; Oklahoma City, Oklahoma; St. Petersburg, Florida; and Salem, Oregon.

CFR programs typically have from 10 to 20 staff members. About half of the staff work directly with families. CFRP staff have had between 14 and 15 years of formal education on the average. The most popular disciplines include social work and sociology, education, mental health and psychology, and child development. Family workers report an average caseload of 22 families. There are a number of differences in the way the six CFR programs are organized. At three of the sites, there is one person who is responsible for working with families, usually a family advocate or home visitor. The other sites employ a team approach to providing services to families. Staff contact occurs mostly in the form of home visits and parent meetings. Most staff provide some direct services to families or refer families to other agencies for a variety of services. Some programs emphasize referrals more than others.

To ensure that CFRP services are individualized to the maximum extent possible and that specific family needs are met, programs have established formal processes for needs assessment. CFRP services are offered within the context of the three major program components--the infant-toddler component, Head Start, and preschool-school linkage. Each is intended to serve families with children in a specific age group; all three taken together are intended to provide continuity--especially developmental and educational continuity--across the period of a child's life from before birth to the primary grades in school. The preschool-school linkage componentof CFRP is the least clearly defined and well-developed of the three major CFRP components.

The Research Report focuses on a group of families selected for participation in the CFRP evaluation. It examines processes used to deliver services to families, CFRP treatment, and preliminary program impact on families and children.

Chapter 1 of this report provides an overview of the study design and implementation of the CFRP evaluation. The characteristics of families in the longitudinal evaluation are presented in Chapter 2. A large proportion of the mothers (41%) are under 20 years of age; 22 percent are teenage mothers under 18. Three-fourths of the mothers are single; about one-third live in extended family situations with the child's grandparents. Over half (55%) of the children who are the focus of the study are firstborn. There are significant across-site differences in the populations the programs serve. This suggests that data from the six sites should not be pooled indiscriminately, but analyzed separately for each site. An examination of the characteristics of the CFRP and control/comparison group at each site showed the two groups to be comparable in most respects.

Chapter 3 describes the CFRP treatment and processes used to deliver services to families in the study. Convincing evidence was found that CFRP places major emphasis on the family. It works through the family as a unit to meet children's needs and to promote their total development. There is extensive parent involvement in the needs assessment process, the development of action plans for services to be obtained through CFRP, and the setting of goals for the family. Among the most frequently reported needs or problem areas were employment, family problems (including lack of child-rearing experience), housing, and insufficient income. The problems and needs of families appear to be very practical ones, most of them not directly related to the development of the child. Family goals mirror problems that family workers and parents identified in the needs assessment process. In the first reporting period, families had an average of 4.9 goals; in the second reporting period the mean number of goals per family was somewhat lower (3.4). The number of goals per family and types of goals were not the same at all six sites. The great majority of the goals concerned parents or the parent and child together. This again reflects the fact that CFRP is a family-oriented program.

The most common type of program contact with families is through periodic home visits and group meetings at the center. In most of the six programs, home visits are reported to take place twice a month, with group sessions occurring on alternate weeks. Group sessions take the form of infant-toddler or parent education sessions, parent or policy council meetings, and social activities. Actual contact with study families since they entered the program, however, was a good deal less. It occurred on the average about twice a month, mostly through home visits by a family advocate or home visitor. Participation in group sessions at the CFR center was minimal during the first nine months after the families entered the program. Families attended an average of one session every three months.

In addition to direct services provided in home visits and group sessions, families are referred an average of once every three months. Parents were the most likely recipients of referral services.

After six months in the program, family workers noted a number of signs of progress in families. They most frequently reported personal growth, taking more responsibility for own needs, making progress toward goals, and taking more responsibility for the child's needs. Almost half of the families had completed one or more goals during the first six months; 41 percent were reported to have made some progress toward attaining one or more additional goals. Parents hold a generally positive view of their participation in CFRP.

Chapter 4 examines preliminary program impact on families and children after six months of participation in the program. There is little evidence yet that CFRP has had a positive impact. It is reasonable to assume that families had been in the program for too short a period of time for such impact to become apparent. It should be noted that a number of the problems that CFRP families face are long-term in nature; in such cases it may not be reasonable to expect positive impact after only six months. For example, it is unlikely that family circumstances--in terms of such things as family income or reliance on public assistance programs--would change in six months. Similarly, changes in parenting skills or the amount of positive interaction between mother and child may not become apparent until the family has been involved in the program for a longer period of time. Results of a pilot study concerning parent-child interaction conducted at two sites (Oklahoma City and Salem) provide preliminary evidence of program impact in this area. CFRP mothers had more frequent interactions with their children than was the case for mothers in the control/comparison group, although program impact on parent-child interaction differed somewhat at the two sites. (Results of this pilot study are presented in Appendix E.)

5.2 Future Study Issues and Preliminary Plans for Phase III

In this section we discuss future study issues based on a careful review of the CFRP evaluation, as well as preliminary plans for the next phase of the study. Because CFRP treatment is of a highly individualized nature designed to meet specific family needs, it is not likely that all families will benefit from the program in the same way. As a result, it is probably not realistic to expect the same kinds of program impact on all outcome domains. These domains--family circumstances, health, child development, parent-child interaction, and capacity for independence--fall essentially into two categories: (1) those that may be viewed as central to the *overall* objectives of CFRP; and (2) those which relate to *specific* family needs and goals. These categories are discussed in more detail below.

One of CFRP's primary goals is to promote the development of children and to meet their needs by working through the family as a unit. This is accomplished through periodic home visits and center sessions which are aimed at improving parenting skills and interactions between parent and child. Because of this underlying CFRP philosophy, all families are expected to benefit from the program over time in the areas of child development and parent-child interactions. The other three domains---family circumstances, health, and capacity for independence--are of a different nature because they are directly related to family needs. For example, one would not expect change in mother's employment status as a program impact except in families that indicated a need or desire for such changes. Program impact in these three domains can only be detected by linking outcomes to needs. Such linkages were not feasible in the past year because data concerning family needs were available only for the CFRP treatment group. In the study's next phase, an attempt will be made to obtain comparable data for the control/comparison group. Program impact analyses will necessarily be more descriptive than statistical as sample sizes will be small.

Much was learned about the processes used to deliver program services to families and about CFRP treatment in the study's first year. Our knowledge of CFRP can be broadened considerably, however. We must get a better understanding of how CFRP functions as a family support program in the community and its effectiveness in helping families. What kinds of support are provided, in what ways, and by whom? Is CFRP more effective as a family support program for certain groups of families, such as teenage mothers, working parents, and so on? These aspects of the program are difficult to assess through brief staff and family interviews or program records. It is even more problematic to try to relate processes and treatment to specific outcome domains, due to the individualized nature of CFRP and family needs. Sample sizes are so small that they may obscure any meaningful relationships. More in-depth interviews may be required to capture the "essence" of CFRP and to provide new insights into program impact on families.

In the next phase we plan to collect data for all three components of the CFRP evaluation. Data collection will take place in spring (1980) rather than in both spring and fall.

The program study will focus on changes in program operations in the past year, and the status of the three program components--infant-toddler, Head Start, and preschool-school linkage. In addition, we will investigate the issue of program contact with families and family participation in program activities. As noted in the previous chapter, contact was considerably lower than anticipated. This may be due simply to underreporting by staff of program contact, or it may have other causes.

A considerable portion of the program study site visits will focus on CFRP linkages with social service agencies in the community. Through interviews with CFRP staff and agency representatives, we will attempt to determine if and in what ways CFRP has had an impact on the availability and quality of services for low-income families. Among the questions to be addressed are: Are services more accessible to families as a result of CFRP? Is there evidence that community agencies are more sensitive and responsive to the needs of low-income families? Do families in CFRP receive services of better quality due to referrals than families not in CFRP? What kinds of changes have taken place in the agency since CFRP became operational and how did CFRP influence these? In addition, we will examine more closely the types of direct services that are provided by CFRP staff. Are these offered because the services are scarce or nonexistent in the community, or are there other reasons? Has CFRP tried to establish working relationships with agencies and, if so, why are they not viable? Is CFRP in any way in direct competition with other agencies in the community or are services duplicated unnecessarily?

The impact study will examine four of the five outcome domains: family circumstances, health, parent-child interaction, and capacity for independence. The development of the focal children will not be directly assessed again until they enter Head Start next year. Instead of child assessments, we plan to expand the parent-child observation study to more sites and additional families per site.

The in-depth study will remain largely unchanged in scope. Data concerning family paticipation, goals, and referrals will continue to be obtained on an ongoing basis. In addition, we plan to conduct interviews with staff about families in the impact study to get their views on progress toward attaining goals and changes in the family that have occurred over time. Families also will be interviewed about their participation in the program.

In the next phase of the study, we will develop a plan for conducting a series of in-depth interviews that would broaden our understanding of how CFRP works with families and functions as a family support program. These interviews would also increase our knowledge about types of impact the program may have which are not evident from the brief interviews that are conducted for the impact study. The in-depth interviews would involve families, the CFRP staff who work with them, as well as agencies in the community that provide services to the families. The addition of these interviews will strengthen the CFRP evaluation considerably.

APPENDICES

A	BASELINE GROUP EQUIVALENCY
B	SAMPLE ATTRITION
C	DESCRIPTION OF EVALUATION INSTRUMENTS
D	TECHNICAL PROGRESS REPORT ON THE BAYLEY SCALES OF INFANT DEVELOPMENT PILOT STUDY
E	TECHNICAL PROGRESS REPORT ON THE TIES PARENT-CHILD INTERACTION PILOT STUDY
F	DATA REDUCTION

Appendix A

BASELINE GROUP EQUIVALENCY

As was noted in Chapter 1, preliminary analyses of baseline socioeconomic status and other child and family data (reported in CFRP Evaluation Report No. 2, March 1979) showed that the CFRP treatment and control/comparison groups were comparable at entry into the evaluation. Group equivalency was re-examined for this report since a group of families with prior Head Start experience were excluded from the evaluation after the previous report was prepared. In addition to examining family demographic characteristics and socioeconomic status, group equivalency in other outcome domains--health, parent-child interaction, and capacity for independence--was assessed for this report. A few significant differences were detected between the groups, as is illustrated in the attached tables. Findings concerning group equivalency by variable domain are briefly summarized below.*

Family characteristics and SES. Baseline comparisons on 26 family characteristics showed the CFRP and control/comparison groups to be equivalent at five of the six CFRP sites. Two statistically significant group differences were detected in Las Vegas, on sex of focal child ($p=.02$) and rental housing ($p=.01$). A greater proportion of CFRP families use rental housing and have male focal children.

Health. On the 16 health variables, groups were equivalent except in New Haven. Comparison mothers had been to the doctor more frequently than mothers in CFRP ($p=.04$).

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*P values reported are simultaneous, joint, or multiple test values within clusters of variables. P values of .10 or less are considered to be statistically significant. The rationale for the multiple t-test approach is discussed in note 1 to Chapter 2.

Parent-child interaction. Group differences were detected at three sites--Las Vegas, Oklahoma City, and Salem--on one of 10 parent-child interaction variables at each site. In Las Vegas, mothers in the control/comparison group considered interactions between male adults and their children to be more important than did mothers in CFRP ($p=.06$). At the other two sites, groups differed in level of parent comfort. In Oklahoma City, control/comparison mothers were more comfortable as parents than CFRP mothers ($p=.09$); the reverse was true in Salem, where CFRP mothers reported being more comfortable ($p=.02$).

Capacity for independence. No group differences were detected on any of the variables concerning coping and use of supports.

Group differences due to non-equivalency at entry into the evaluation will be statistically controlled to ensure that they neither create nor mask important impact study results. This will be done only for analyses where group differences appear to be relevant or have a potential impact on outcomes examined. It would not be appropriate, for example, to control for differences in the proportion of families who live in rental housing when comparing the two groups on parent-child interaction variables.

Baseline Group Equivalency Table A-1

Jackson

Jackson

Group Comparisons
CFRP-Control/Comparison

A. Child Characteristics

Variable	CFRP N	CFRP Mean	CFRP S.D.	CONTROL N	CONTROL Mean	CONTROL S.D.	F	p*	p**
Focal child age	40	.33	.25	24	.36	.23	.27	.61	NS
Firstborns (%)	40	63	—	24	42	—	2.65	.11	NS
Focal child sex (% female)	40	60	—	24	50	—	.60	.44	NS
Non-white (%)	40	35	—	24	33	—	.02	.89	NS

B. Household Composition and Characteristics

Mother's age (years)	40	21.30	4.01	24	23.91	5.97	4.39	.04	NS
Teenage mothers (%)	40	18	—	24	13	—	.28	.61	NS
'Marital Status'	39	.41	.50	23	.57	.51	1.37	.25	NS
Family types (%)									
1. Two-parent	40	33	—	24	48	—	.53	.47	NS
2. Single-no other adults	40	30	—	24	29	—	.01	.94	NS
3. Single with child's grandparents	40	30	—	24	17	—	1.41	.24	NS
4. Single with other unrelated adults	40	8	—	24	8	—	.01	.91	NS
Total household size	40	4.38	1.90	24	4.92	2.02	1.16	.29	NS
Total number of children	40	2.20	1.38	24	2.67	1.38	1.59	.21	NS
Infants (0-3)	40	1.38	.59	24	1.54	.78	.95	.33	NS
Preschoolers (3-5)	40	.18	.39	24	.33	.70	1.36	.25	NS
School age (5-18)	40	.65	1.29	24	.79	1.18	.19	.66	NS

C. Socioeconomic Status

Per capita income ($1,000)	28	1.58	.74	17	1.75	.75	.52	.48	NS
'Income Sources'	39	-.21	1.01	23	-.01	.95	.58	.45	NS
Welfare (%)	39	77	—	23	83	—	.29	.59	NS
Wages (%)	39	69	—	23	83	—	1.46	.23	NS
Mother's employment (%)	35	29	—	23	43	—	1.30	.26	NS
Mother's education (% with H.S.)	39	38	—	23	48	—	.50	.48	NS

D. Other Family Circumstances

Rental housing (%)	39	69	—	23	52	—	1.72	.20	NS
Subsidized housing (%)	38	8	—	23	4	—	.32	.57	NS
Years at present address	40	2.98	5.69	24	2.43	4.18	.17	.68	NS
# moves in last 5 years	38	5.00	8.50	22	4.96	4.64	.00	.98	NS

*univariate t-test
**multiple t-test
' ' constructs

Jackson

E. Birth Circumstances and Prenatal Care

Variable	CFRP N	CFRP Mean	CFRP S.D.	CONTROL N	CONTROL Mean	CONTROL S.D.	F	P*	P**
# weeks pregnant at 1st doctor visit	40	12.23	5.23	23	12.04	4.90	.02	.89	NS
Pregnancy complications (%)	40	28	——	24	29	——	.02	.89	NS
Difficult delivery (%)	40	23	——	24	17	——	.31	.58	NS
High risk children (%)	40	20	——	24	21	——	.01	.94	NS

F. Child Health

Variable	CFRP N	CFRP Mean	CFRP S.D.	CONTROL N	CONTROL Mean	CONTROL S.D.	F	P*	P**
Weight at birth	40	6.73	1.27	24	7.27	1.37	2.64	.11	NS
Mother rating of weight	40	1.98	.48	23	2.00	.30	.05	.82	NS
# focal child doctor visits	40	4.15	3.96	23	5.09	3.53	.88	.35	NS
# reasons for doctor visits	40	2.03	1.39	24	2.00	.88	.01	.94	NS
# doctor visits older children in past year	15	5.42	7.48	13	2.90	3.03	1.29	.27	NS
Continuous health problems older children(%)	16	44	——	15	27	——	.95	.34	NS

G. Maternal Health

Variable	CFRP N	CFRP Mean	CFRP S.D.	CONTROL N	CONTROL Mean	CONTROL S.D.	F	P*	P**
# Doctor visits (other than prenatal care) in past year	39	.92	1.46	23	1.43	2.43	1.08	.30	NS
Serious continuous health problems (%)	40	25	——	24	29	——	.13	.72	NS

H. Health Care

Variable	CFRP N	CFRP Mean	CFRP S.D.	CONTROL N	CONTROL Mean	CONTROL S.D.	F	P*	P**
Medical insurance (%)	40	88	——	24	92	——	.26	.61	NS
Medicaid (%)	35	83	——	22	100	——	4.39	.04	NS
# different health care facilities used	40	2.63	1.25	23	3.26	1.42	3.40	.07	NS
Difficulty obtaining health care (%)	40	13	——	24	21	——	.78	.38	NS

*univariate t-test
**multiple t-test

Jackson

I. Infant Temperament and Parent Comfort

		CFRP			CONTROL				
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Predictability of baby hunger	40	4.03	1.42	23	4.09	1.41	.03	.87	NS
Regularity of sleeping pattern	40	3.73	1.50	23	3.57	1.53	.16	.69	NS
Mood while eating	40	2.25	1.32	23	2.09	1.28	.23	.63	NS
Mood while being dressed/diapered	40	3.88	1.47	23	4.22	1.35	.88	.35	NS
Level of attention needed	40	3.18	.81	23	3.04	.56	.58	.45	NS
Parent comfort	40	3.38	.93	23	3.70	.90	1.82	.19	NS
J. Parent-Child Interactions									
Mother can comfort child (%)	40	100	—	23	100	—	—	—	NS
Child interaction with males (%)	38	92	—	23	100	—	1.91	.17	NS
Importance of male interaction	39	1.85	.90	23	1.83	.89	.01	.93	NS
K. Aspirations									
Baby's educational attainment	26	4.38	1.60	11	4.45	1.51	.02	.90	NS

*univariate t-test
**multiple t-test

Jackson

L. Coping

		CFRP			CONTROL				
Situations	N	Mean	S.D	N	Mean	S.D	F	P*	P**
Hassles:									
Child care (%)	38	50	—	23	70	—	2.34	.13	NS
Housing (%)	39	51	—	23	43	—	.35	.56	NS
Repairs (%)	39	44	—	23	65	—	2.79	.10	NS
Job (%)	39	36	—	23	43	—	.34	.57	NS
Food/clothing (%)	39	38	—	23	49	—	.50	.48	NS
Pay bills (%)	38	53	—	23	52	—	.00	.97	NS
Transportation (%)	39	54	—	23	30	—	3.39	.07	NS
Public services (%)	39	10	—	23	22	—	1.30	.26	NS
Frequency hassled	38	.45	.31	22	.55	.27	1.56	.22	NS

M. Use of Support

Sources of Support									
Formal:									
Use clinics (%)	40	28	—	24	38	—	.68	.41	NS
Use physician (%)	40	90	—	24	100	—	2.58	.11	NS
# agency visits	29	2.16	1.01	19	2.28	.81	.19	.67	NS
Advice from professionals or agencies	40	.15	.36	23	.22	.42	.45	.51	NS
Help from professionals or agencies	40	.15	.36	24	.25	.44	.97	.33	NS
Informal:									
Parent involvement (friends)	39	1.21	.80	23	1.26	.86	.06	.80	NS
Parent involvement (organized groups)	38	1.21	.91	23	1.39	1.20	.38	.54	NS
Person helpful	31	2.16	1.37	18	3.06	1.63	4.23	.05	NS
Help with baby	36	2.42	.81	22	2.55	.80	.35	.56	NS
Help with older children	40	.28	.45	24	.42	.50	1.35	.25	NS
Advice from family	40	.70	.46	23	.39	.50	6.12	.02	NS
Advice from friends	40	.15	.36	23	.39	.50	4.90	.03	NS
Help from family	40	.83	.36	24	.85	.38	.03	.86	NS
Help from friends	40	.70	.46	24	.75	.44	.18	.67	NS
Help from no one	40	.48	.51	24	.38	.49	.60	.44	NS

Baseline Group Equivalency Table A-2

Las Vegas

Las Vegas

Group Comparisons
CFRP-Control/Comparison

A. Child Characteristics

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Focal child age	42	.30	.25	43	.33	.29	.18	.67	NS
Firstborns (%)	42	95	—	43	91	—	.66	.42	NS
Focal child sex (% female)	42	36	—	43	65	—	7.85	<.01	.02
Non-white (%)	38	79	—	43	88	—	1.32	.25	NS

B. Household Composition and Characteristics

Mother's age (years)	42	19.73	4.62	43	18.95	2.48	.94	.33	NS
Teenage mothers (%)	42	50	—	43	40	—	.93	.34	NS
'Marital Status'	42	.26	.45	43	.30	.47	.17	.68	NS
Family types (%)									
1. Two-parent	42	19	—	43	21	—	.05	.63	NS
2. Single-no other adults	42	10	—	43	7	—	.18	.67	NS
3. Single with child's grandparents	42	64	—	43	58	—	.33	.57	NS
4. Single with other unrelated adults	42	7	—	43	14	—	1.03	.31	NS
Total household size	42	5.43	2.48	43	5.88	2.69	.66	.42	NS
Total number of children	42	2.64	1.62	43	3.26	2.15	2.20	.14	NS
Infants (0-3)	42	1.21	.57	43	1.37	.66	1.14	.24	NS
Preschoolers (3-5)	42	.10	.30	43	.28	.63	2.94	.09	NS
School age (5-18)	42	1.38	1.45	43	1.61	1.75	.41	.52	NS

C. Socioeconomic Status

Per capita income ($1,000)	36	1.70	.80	31	1.79	.79	.26	.61	NS
'Income Sources'	38	.16	.70	40	.16	.73	.00	.98	NS
Welfare (%)	42	83	—	43	81	—	.05	.82	NS
Wages (%)	42	86	—	43	81	—	.28	.60	NS
Mother's employment (%)	37	24	—	34	24	—	.00	.94	NS
Mother's education (% with H.S.)	42	45	—	43	47	—	.01	.91	NS

D. Other Family Circumstances

Rental housing (%)	42	74	—	43	44	—	8.29	<.01	.01
Subsidized housing (%)	42	55	—	41	46	—	.58	.45	NS
Years at present address	42	4.41	5.06	43	3.74	4.84	.38	.54	NS
# moves in last 5 years	42	3.02	4.16	43	2.74	2.83	.13	.72	NS

*univariate t-test
**multiple t-test
' ' constructs

Las Vegas

E. Birth Circumstances and Prenatal Care

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
# weeks pregnant at 1st doctor visit	41	11.27	7.58	43	11.19	6.83	.00	.96	NS
Pregnancy complications (%)	41	17	—	43	26	—	.89	.35	NS
Difficult delivery (%)	42	40	—	42	40	—	.00	1.00	NS
High risk children (%)	42	19	—	43	16	—	.11	.74	NS
F. Child Health									
Weight at birth	42	7.24	1.33	42	7.14	1.37	.13	.72	NS
Mother rating of weight	41	1.98	.52	42	2.00	.62	.04	.85	NS
# focal child doctor visits	42	5.07	3.70	40	5.73	4.84	.48	.49	NS
# reasons for doctor visits	42	2.24	1.14	43	2.35	1.09	.21	.65	NS
# doctor visits older children in past year	1	3.50	.00	2	5.50	6.36	.07	.84	NS
Continuous health problems older children(%)	1	100	—	2	100	—	—	—	—
G. Maternal Health									
# doctor visits (other than prenatal care) in past year	42	1.29	2.80	42	.71	1.17	1.48	.23	NS
Serious continuous health problems (%)	42	17	—	42	21	—	.30	.58	NS
H. Health Care									
Medical insurance (%)	41	93	—	42	90	—	.13	.72	NS
Medicaid (%)	37	92	—	38	100	—	3.26	.08	NS
# Different health care facilities used	42	3.60	1.64	43	3.19	1.56	1.39	.24	NS
Difficulty obtaining health care (%)	41	7	—	42	14	—	1.03	.31	NS

*univariate t-test
**multiple t-test

Las Vegas

I. Infant Temperament and Parent Comfort

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	p*	p**
Predictability of baby hunger	42	3.29	1.50	43	3.26	1.50	.01	.93	NS
Regularity of sleeping pattern	42	3.14	1.47	43	3.60	1.51	2.02	.16	NS
Mood while eating	42	3.36	1.51	43	3.47	1.52	.11	.74	NS
Mood while being dressed/diapered	42	3.64	1.51	43	3.05	1.45	3.45	.07	NS
Level of attention needed	42	3.26	.83	43	3.53	.70	2.69	.11	NS
Parent comfort	42	3.46	.84	42	3.43	.76	.04	.84	NS

J. Parent-Child Interactions

Mother can comfort child (%)	42	98	—	42	98	—	.00	1.00	NS
Child interaction with males (%)	42	90	—	43	91	—	.00	.97	NS
Importance of male interaction	42	1.79	.92	43	2.28	1.03	.38	.02	.06

K. Aspirations

Baby's educational attainment	41	5.44	1.47	42	5.43	1.61	.00	.98	NS

*univariate t-test
**multiple t-test

Las Vegas

L. Coping

	CFRP			CONTROL					
	N	Mean	S.D	N	Mean	S.D	F	P*	P**
Situations									
Hassles:									
Child care (%)	42	38	—	43	44	—	.31	.57	NS
Housing (%)	42	45	—	43	51	—	.29	.59	NS
Repairs (%)	42	55	—	43	70	—	2.04	.16	NS
Job (%)	42	55	—	43	43	—	1.19	.28	NS
Food/clothing (%)	42	40	—	43	44	—	.12	.73	NS
Pay bills (%)	42	52	—	43	47	—	.29	.59	NS
Transportation (%)	42	50	—	42	51	—	.01	.92	NS
Public services (%)	42	26	—	43	33	—	.41	.53	NS
Frequency hassled	42	.50	.37	43	.55	.33	.35	.56	NS

M. Use of Support

Sources of Support									
Formal:									
Use clinics (%)	42	52	—	43	53	—	.01	.92	NS
Use physician (%)	42	88	—	43	81	—	.73	.40	NS
# agency visits	34	2.80	1.31	37	2.59	1.13	.55	.46	NS
Advice from professionals or agencies	42	.24	.43	43	.28	.45	.18	.67	NS
Help from professionals or agencies	42	.14	.35	43	.12	.32	.13	.72	NS
Informal:									
Parent involvement (friends)	42	1.10	.79	43	1.28	.77	1.19	.28	NS
Parent involvement (organized groups)	42	1.57	1.17	43	1.72	1.33	.30	.58	NS
Person helpful	35	2.49	1.25	35	2.40	1.31	.08	.78	NS
Help with baby	37	2.32	.85	39	2.54	.76	1.35	.25	NS
Help with older children	42	.02	.15	43	.05	.21	.31	.58	NS
Advice from family	42	.57	.50	43	.60	.49	.10	.76	NS
Advice from friends	42	.14	.35	43	.12	.32	.13	.72	NS
Help from family	42	.93	.26	43	.91	.29	.13	.72	NS
Help from friends	42	.81	.40	43	.84	.37	.11	.74	NS
Help from no one	42	.19	.40	43	.21	.41	.05	.83	NS

Baseline Group Equivalency Table A-3

New Haven

New Haven

Group Comparisons
CFRP-Control/Comparison

A. Child Characteristics

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	p*	p**
Focal child age	36	.39	.28	20	.48	.31	1.04	.31	NS
Firstborns (%)	36	39	—	20	55	—	1.33	.25	NS
Focal child sex (% female)	36	56	—	20	65	—	.46	.50	NS
Non-white (%)	36	83	—	20	85	—	.03	.87	NS

B. Household Composition and Characteristics

Variable	N	Mean	S.D.	N	Mean	S.D.	F	p*	p**
Mother's age (years)	36	24.65	5.90	19	22.58	4.75	1.74	.19	NS
Teenage mothers (%)	36	11	—	20	25	—	1.83	.18	NS
'Marital Status'	36	.56	.50	19	.42	.51	.88	.36	NS
Family types (%)									
1. Two-parent	36	33	—	20	25	—	.41	.52	NS
2. Single-no other adults	36	47	—	20	40	—	.26	.61	NS
3. Single with child's grandparents	36	14	—	20	30	—	2.12	.15	NS
4. Single with other unrelated adults	36	6	—	20	5	—	.01	.93	NS
Total household size	36	4.42	1.87	20	4.55	1.99	.66	.80	NS
Total number of children	36	2.75	1.68	20	2.45	1.47	.06	.51	NS
Infants (0-3)	36	1.36	.54	20	1.30	.47	.45	.67	NS
Preschoolers (3-5)	36	.36	.49	20	.20	.41	1.57	.22	NS
School age (5-18)	36	1.03	1.46	20	.95	1.32	.04	.84	NS

C. Socioeconomic Status

Variable	N	Mean	S.D.	N	Mean	S.D.	F	p*	p**
Per capita income ($1,000)	30	1.57	.64	12	1.64	.80	.07	.80	NS
'Income Sources'	34	-.36	1.27	18	-.13	1.27	.38	.54	NS
Welfare (%)	34	68	—	18	67	—	.00	.95	NS
Wages (%)	33	48	—	18	61	—	.74	.40	NS
Mother's employment(%)	27	26	—	13	15	—	.61	.44	NS
Mother's education (% with H.S.)	36	47	—	19	42	—	.13	.72	NS

D. Other Family Circumstances

Variable	N	Mean	S.D.	N	Mean	S.D.	F	p*	p**
Rental housing (%)	36	83	—	19	79	—	.14	.71	NS
Subsidized housing (%)	33	9	—	18	11	—	.05	.83	NS
Years at present address	36	2.04	2.15	19	2.02	2.09	.00	.97	NS
# moves in last 5 years	36	2.56	2.85	17	2.53	1.24	.00	.97	NS

*univariate t-test
**multiple t-test
' ' constructs

New Haven

E. Birth Circumstances and Prenatal Care

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
# weeks pregnant at 1st doctor visit	36	11.03	6.91	19	8.37	4.27	2.33	.13	NS
Pregnancy complications (%)	36	22	—	19	37	—	1.32	.26	NS
Difficult delivery (%)	36	22	—	20	20	—	.04	.85	NS
High risk children (%)	36	22	—	20	10	—	1.29	.26	NS

F. Child Health

Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Weight at birth	36	7.28	1.66	20	7.17	.90	.07	.80	NS
Mother rating of weight	35	1.83	.38	20	1.90	.31	.51	.48	NS
# focal child doctor visits	36	4.89	3.54	20	4.50	4.42	.13	.72	NS
# reasons for doctor visits	36	2.06	1.22	20	2.00	1.21	.03	.87	NS
# doctor visits older children in past year	21	2.40	3.86	9	3.09	3.86	.20	.66	NS
Continuous health problems older children(%)	22	32	—	9	11	—	1.40	.25	NS

G. Maternal Health

Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
# doctor visits (other than prenatal care) in past year	36	.44	.94	20	1.55	2.50	5.66	.02	.04
Serious continuous health problems (%)	36	33	—	20	30	—	.06	.80	NS

H. Health Care

Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Medical insurance (%)	36	81	—	20	95	—	2.20	.14	NS
Medicaid (%)	27	78	—	19	95	—	2.51	.12	NS
# different health care facilities used	36	1.64	.80	19	2.21	1.23	4.35	.04	NS
Difficulty obtaining health care (%)	34	29	—	20	25	—	.12	.73	NS

*univariate t-test
**multiple t-test

New Haven

I. Infant Temperament and Parent Comfort

Variable	CFRP N	CFRP Mean	CFRP S.D.	CONTROL N	CONTROL Mean	CONTROL S.D.	F	P*	P**
Predictability of baby hunger	36	3.92	1.46	19	3.58	1.54	.62	.44	NS
Regularity of sleeping pattern	36	4.00	1.43	19	3.26	1.52	3.03	.09	NS
Mood while eating	36	3.83	1.48	19	3.74	1.52	.05	.82	NS
Mood while being dressed/diapered	36	3.17	1.48	17	3.41	1.54	.30	.59	NS
Level of attention needed	36	3.17	.81	19	3.00	.58	.77	.38	NS
Parent comfort	36	3.35	.76	19	3.26	.86	.13	.72	NS

J. Parent-Child Interactions

Mother can comfort child (%)	36	78	—	19	100	—	5.23	.03	NS
Child interaction with males (%)	35	86	—	18	94	—	.88	.35	NS
Importance of male interaction	36	2.06	.79	19	2.53	.70	4.77	.03	NS

K. Aspirations

Baby's educational attainment	17	4.47	1.77	11	4.91	1.81	.40	.53	NS

*univariate t-test
**multiple t-test

New Haven

L. Coping

		CFRP			CONTROL				
	N	Mean	S.D	N	Mean	S.D	F	P*	P**
Situations									
Hassles:									
Child care (%)	36	58	—	19	37	—	2.31	.14	NS
Housing (%)	36	53	—	19	42	—	.55	.46	NS
Repairs (%)	36	61	—	19	37	—	2.99	.09	NS
Job (%)	36	42	—	19	32	—	.53	.47	NS
Food/clothing (%)	36	64	—	18	39	—	3.03	.09	NS
Pay bills (%)	35	54	—	19	47	—	.23	.64	NS
Transportation (%)	36	58	—	19	47	—	.58	.45	NS
Public services (%)	36	19	—	19	16	—	.12	.74	NS
Frequency hassled	35	.50	.29	19	.36	.32	2.62	.11	NS

M. Use of Support

Sources of Support									
Formal:									
Use clinics (%)	36	67	—	20	70	—	.06	.80	NS
Use physician (%)	36	31	—	20	40	—	.50	.48	NS
# agency visits	18	1.61	.60	9	1.90	1.35	.60	.44	NS
Advice from professionals or agencies	36	.25	.44	19	.32	.48	.26	.61	NS
Help from professionals or agencies	36	.11	.32	20	.20	.41	.81	.37	NS
Informal:									
Parent involvement (friends)	36	.94	.89	19	1.32	.75	2.66	.11	NS
Parent involvement (organized groups)	26	1.46	1.07	11	.91	.94	2.43	.13	NS
Person helpful	33	2.60	1.32	15	2.00	1.51	1.98	.17	NS
Help with baby	28	2.71	.60	17	2.12	.99	6.36	.02	NS
Help with older children	36	.28	.45	20	.20	.41	.40	.53	NS
Advice from family	36	.47	.51	29	.47	.51	.000	.99	NS
Advice from friends	36	.22	.42	19	.21	.42	.01	.92	NS
Help from family	36	.86	.35	20	.90	.31	.17	.68	NS
Help from friends	36	.75	.44	20	.45	.51	5.34	.02	NS
Help from no one	36	.36	.49	20	.50	.51	1.00	.32	NS

Baseline Group Equivalency Table A-4

Oklahoma City

Oklahoma City

Group Comparisons
CFRP-Control/Comparison

A. Child Characteristics

Variable	CFRP			CONTROL					
	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Focal child age	39	.33	.31	49	.29	.25	.35	.56	NS
Firstborns (%)	39	42	—	49	37	—	.17	.69	NS
Focal child sex(% female)	39	59	—	49	47	—	1.25	.27	NS
Non-white (%)	39	92	—	49	94	—	.08	.77	NS

B. Household Composition and Characteristics

Variable	CFRP			CONTROL					
	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Mother's age (years)	39	22.01	5.32	49	21.86	4.99	.02	.90	NS
Teenage mothers (%)	39	15	—	49	18	.39	.13	.72	NS
'Marital Status'	39	.64	.49	48	.50	.51	1.74	.19	NS
Family types (%)									
1. Two-parent	39	39	—	49	35	—	.13	.72	NS
2. Single-no other adults	39	21	—	49	14	—	.59	.45	NS
3. Single with child's grandparents	39	31	—	49	41	—	2.38	.13	NS
4. Single with other unrelated adults	39	10	—	49	2	—	1.76	.10	NS
Total household size	39	5.13	2.00	49	5.92	2.73	2.29	.13	NS
Total number of children	39	2.95	1.64	49	3.27	1.92	.67	.42	NS
Infants (0-3)	39	1.49	.60	49	1.49	.65	.00	.98	NS
Preschoolers (3-5)	39	.39	.63	49	.37	.49	.02	.89	NS
School age (5-18)	39	1.05	1.54	49	1.41	1.55	1.16	.29	NS

C. Socioeconomic Status

Variable	CFRP			CONTROL					
	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Per capita income ($1,000)	30	1.70	.75	39	1.45	.82	1.69	.20	NS
'Income Sources'	37	.26	1.06	48	.21	.94	.06	.81	NS
Welfare (%)	39	62	—	49	59	—	.05	.83	NS
Wages (%)	39	79	—	48	77	—	.07	.79	NS
Mother's employment	35	29	—	46	37	—	.62	.43	NS
Mother's education (% with H.S.)	39	56	—	48	63	—	.32	.57	NS

D. Other Family Circumstances

Variable	CFRP			CONTROL					
	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Rental housing (%)	39	54	—	48	38	—	2.31	.13	NS
Subsidized housing (%)	39	26	—	46	24	—	.03	.86	NS
Years at present address	39	3.70	4.82	49	5.20	6.69	1.38	.24	NS
# moves in last 5 years	39	2.44	2.92	49	2.49	2.47	.01	.93	NS

*univariate t-test
**multiple t-test
' ' constructs

Oklahoma City

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
E. Birth Circumstances and Prenatal Care									
# weeks pregnant at 1st doctor visit	39	10.15	5.86	47	11.60	6.86	1.07	.30	NS
Pregnancy complications (%)	39	28	——	49	33	——	.20	.66	NS
Difficult delivery (%)	38	29	——	48	19	——	1.23	.27	NS
High risk children (%)	39	26	——	49	26	——	.01	.93	NS
F. Child Health									
Weight at birth	39	6.96	1.40	49	6.61	1.39	1.39	.24	NS
Mother rating of weight	39	1.87	.52	47	2.09	.54	3.39	.07	NS
# focal child doctor visits	38	6.11	6.59	46	4.04	3.70	3.27	.07	NS
# reasons for doctor visits	39	2.05	1.26	49	1.53	.92	5.06	.03	NS
# doctor visits older children in past year	23	1.82	2.90	28	2.45	3.60	.46	.50	NS
Continuous health problems older children(%)	23	23	——	31	26	——	.12	.74	NS
G. Maternal Health									
# doctor visits (other than prenatal care) in past year	39	.67	1.13	49	1.53	3.71	1.96	.17	NS
Serious continuous health problems (%)	39	26	——	49	20	——	.33	.57	NS
H. Health Care									
Medical insurance (%)	39	90	——	48	90	——	.00	.98	NS
Medicaid (%)	34	98	——	42	90	——	1.31	.26	NS
# different health care facilities used	39	2.15	1.11	48	2.85	1.52	5.79	.02	NS
Difficulty obtaining health care (%)	39	23	——	44	16	——	.67	.41	NS

*univariate t-test
**multiple t-test

Oklahoma City

I. Infant Temperament and Parent Comfort

Variable	CFRP			CONTROL					
	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Predictability of baby hunger	39	3.23	1.50	49	3.29	1.50	.03	.87	NS
Regularity of sleeping pattern	39	3.46	1.52	48	3.13	1.47	1.08	.30	NS
Mood while eating	39	3.31	1.51	48	3.31	1.50	.00	.99	NS
Mood while being dressed/diapered	39	3.15	1.48	47	3.72	1.50	3.13	.08	NS
Level of attention needed	39	3.23	.96	48	3.38	.94	.50	.48	NS
Parent comfort	39	3.28	.91	47	3.62	.86	3.03	.09	.09

J. Parent-Child Interactions

Mother can comfort child (%)	38	100	—	48	98	—	.79	.38	NS
Child interaction with males (%)	39	95	—	46	96	—	.03	.87	NS
Importance of male interaction	37	1.78	.85	48	2.10	1.12	2.10	.15	NS

K. Aspirations

Baby's educational attainment	17	5.00	1.62	20	5.60	1.27	1.59	.22	NS

*univariate t-test
**multiple t-test

Oklahoma City

L. Coping

	CFRP			CONTROL					
	N	Mean	S.D	N	Mean	S.D	F	p*	p**
Situations									
Hassles:									
Child care (%)	39	51	—	48	31	—	3.61	.06	NS
Housing (%)	38	50	—	48	40	—	.92	.34	NS
Repairs (%)	39	56	—	48	46	—	.96	.33	NS
Job (%)	39	46	—	46	46	—	.00	.96	NS
Food/clothing (%)	38	45	—	48	58	—	1.56	.22	NS
Pay bills (%)	39	59	—	48	54	—	.20	.66	NS
Transportation (%)	39	38	—	48	58	—	3.46	.07	NS
Public services (%)	39	23	—	48	23	—	.00	.99	NS
Frequency hassled	38	.47	.33	47	.58	.33	2.25	.14	NS

M. Use of Support

	CFRP			CONTROL					
	N	Mean	S.D	N	Mean	S.D	F	p*	p**
Sources of Support									
Formal:									
Use clinics (%)	39	74	—	49	67	—	.50	.48	NS
Use physician (%)	39	23	—	49	41	—	3.13	.08	.01
# agency visits	28	1.92	.96	36	1.76	.71	.58	.45	NS
Advice from professionals or agencies	39	.15	.37	48	.06	.24	1.93	.17	NS
Help from professionals or agencies	39	.15	.37	49	.02	.14	5.49	.02	NS
Informal:									
Parent involvement (friends)	39	1.05	.86	48	1.13	.84	.16	.69	NS
Parent involvement (organized groups)	37	1.54	.96	44	1.36	.89	.72	.40	NS
Person helpful	34	2.21	1.30	44	2.25	1.64	.02	.90	NS
Help with baby	35	2.54	.78	45	2.27	.89	2.11	.15	NS
Help with older children	39	.46	.51	49	.53	.50	.41	.53	NS
Advice from family	39	.56	.50	48	.75	.44	3.40	.07	NS
Advice from friends	39	.26	.44	48	.17	.38	1.05	.31	NS
Help from family	39	1.00	.00	49	.98	.14	.79	.38	NS
Help from friends	39	.64	.49	49	.55	.50	.72	.40	NS
Help from no one	39	.20	.41	49	.20	.41	.00	.99	NS

Baseline Group Equivalency Table A-5

St. Petersburg

St. Petersburg

Group Comparisons
CFRP-Control/Comparison

A. Child Characteristics

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Focal child age	40	.26	.23	43	.23	.22	.37	.54	NS
Firstborns (%)	40	38	—	43	54	—	2.14	.15	NS
Focal child sex (% female)	40	43	—	43	42	—	.00	.95	NS
Non-white (%)	40	88	—	41	91	—	.18	.67	NS

B. Household Composition and Characteristics

Mother's age (years)	40	22.77	5.83	43	21.16	5.06	1.81	.18	NS
Teenage mothers (%)	40	20	—	43	23	.43	.13	.72	NS
'Marital Status'	39	.31	.47	41	.29	.46	.02	.89	NS
Family types (%)									
1. Two-parent	40	10	—	43	16	—	.70	.41	NS
2. Single-no other adults	40	50	—	43	23	—	6.79	.01	NS
3. Single with child's grandparents	40	33	—	43	47	—	1.69	.20	NS
4. Single with other unrelated adults	40	3	—	43	12	—	2.59	.11	NS
Total household size	40	4.60	4.60	43	5.79	2.66	5.01	.03	NS
Total number of children	40	2.68	2.68	43	3.51	2.25	3.70	.06	NS
Infants (0-3)	40	1.45	1.45	43	1.47	.70	.01	.91	NS
Preschoolers (3-5)	40	.23	.23	43	.33	.47	1.03	.31	NS
School age (5-18)	40	.90	.90	43	1.44	1.88	2.16	.15	NS

C. Socioeconomic Status

Per capita income ($1,000)	34	1.54	.77	30	1.49	.81	.07	.80	NS
'Income Sources'	38	.13	1.07	40	.15	1.06	.01	.93	NS
Welfare (%)	36	56	—	36	64	—	.50	.48	NS
Wages (%)	37	81	—	38	71	—	1.02	.32	NS
Mother's employment (%)	34	35	—	36	22	—	1.44	.23	NS
Mother's education (% with H.S.)	39	49	—	41	56	—	.42	.52	NS

D. Other Family Circumstances

Rental housing (%)	39	59	—	41	41	—	2.46	.12	NS
Subsidized housing (%)	39	15	—	39	10	—	.45	.51	NS
Years at present address	40	3.38	4.23	43	5.12	5.23	2.78	.10	NS
# moves in last 5 years	38	2.08	1.87	41	1.95	3.55	.04	.84	NS

*univariate t-test
**multiple t-test
' ' constructs

St. Petersburg

E. Birth Circumstances and Prenatal Care

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
# weeks pregnant at 1st doctor visit	38	11.05	5.54	42	10.38	5.62	.29	.59	NS
Pregnancy complications (%)	40	38	——	43	21	——	2.80	.10	NS
Difficult delivery (%)	40	28	——	41	22	——	.33	.57	NS
High risk children (%)	40	23	——	43	42	——	1.74	.19	NS
F. Child Health									
Weight at birth	40	6.93	1.31	43	7.33	1.20	2.16	.15	NS
Mother rating of weight	40	1.98	.48	43	1.98	.46	.00	.99	NS
# focal child doctor visits	40	4.35	3.08	43	6.72	5.71	5.43	.02	NS
# reasons for doctor visits	25	1.75	.87	43	2.00	.98	1.51	.22	NS
# doctor visits older children in past year	25	2.08	2.59	19	1.64	1.98	.37	.54	NS
Continuous health problems older children(%)	25	24	——	20	20	——	.10	.76	NS
G. Maternal Health									
# doctor visits (other than prenatal care) in past year	40	.83	2.05	43	1.26	1.79	1.05	.31	NS
Serious continuous health problems (%)	40	23	——	43	42	——	3.61	.06	NS
H. Health Care									
Medical insurance (%)	40	75	——	43	79	——	.19	.66	NS
Medicaid (%)	28	93	——	32	97	——	.50	.48	NS
# different health care facilities used	39	2.46	1.12	43	2.95	1.46	2.88	.09	NS
Difficulty obtaining health care (%)	30	27	——	43	33	——	.28	.60	NS

*univariate t-test
**multiple t-test

St. Petersburg

I. Infant Temperament and Parent Comfort

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Predictability of baby hunger	40	3.28	1.50	40	3.20	1.49	.05	.82	NS
Regularity of sleeping pattern	40	3.28	1.50	40	3.35	1.51	.05	.82	NS
Mood while eating	40	3.73	1.50	40	3.28	1.50	1.80	.18	NS
Mood while being dressed/diapered	40	3.95	1.45	40	3.65	1.51	.83	.37	NS
Level of attention needed	40	3.35	.83	40	3.38	.84	.02	.89	NS
Parent comfort	40	3.81	1.00	40	3.48	.93	2.43	.12	NS

J. Parent-Child Interactions

Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Mother can comfort child (%)	40	97	—	40	97	—	.00	1.00	NS
Child interaction with males (%)	39	90	—	40	85	—	.39	.53	NS
Importance of male interaction	40	1.83	.87	41	2.27	.98	4.63	.03	NS

K. Aspirations

Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Baby's educational attainment	24	5.38	1.50	30	4.80	1.61	1.81	.18	NS

*univariate t-test
**multiple t-test

St. Petersburg

L. Coping

	CFRP			CONTROL					
Situations	N	Mean	S.D	N	Mean	S.D	F	P*	P**
Hassles: (%)									
Child care (%)	39	64	—	42	60	—	.18	.68	NS
Housing (%)	39	33	—	42	26	—	.48	.49	NS
Repairs (%)	39	51	—	42	60	—	2.55	.46	NS
Job (%)	39	46	—	42	48	—	1.02	.90	NS
Food/clothing (%)	39	72	—	42	62	—	.88	.35	NS
Pay bills (%)	39	69	—	42	64	—	.22	.64	NS
Transportation (%)	39	69	—	42	57	—	1.25	.27	NS
Public services (%)	39	21	—	42	21	—	.01	.92	NS
Frequency hassled	38	.44	.34	40	.51	.38	.74	.39	NS

M. Use of Support

Sources of Support	N	Mean	S.D	N	Mean	S.D	F	P*	P**
Formal:									
Use clinics (%)	40	88	—	43	88	—	.02	.90	NS
Use physician (%)	40	53	—	43	70	—	2.63	.11	NS
# agency visits	26	1.92	.87	31	2.22	1.10	1.25	.27	NS
Advice from professionals or agencies	40	.30	.46	42	.29	.46	.02	.89	NS
Help from professionals or agencies	40	.08	.27	43	.14	.35	.88	.35	NS
Informal:									
Parent involvement (friends)	39	.79	.80	40	1.08	.76	2.53	.12	NS
Parent involvement (organized groups)	39	1.26	.97	40	1.35	.89	.20	.66	NS
Person helpful	34	2.97	1.57	38	3.37	1.79	1.00	.32	NS
Help with baby	30	2.20	.92	33	2.18	.95	.01	.94	NS
Help with older children	43	.35	.48	40	.28	.45	.48	.49	NS
Advice from family	40	.45	.50	42	.57	.50	1.20	.28	NS
Advice from friends	40	.23	.42	42	.12	.33	1.62	.21	NS
Help from family	40	.93	.27	43	.88	.32	.40	.53	NS
Help from friends	40	.73	.45	43	.72	.45	.00	.97	NS
Help from no one	40	.35	.48	43	.47	.50	1.12	.29	NS

Baseline Group Equivalency Table A-6

Salem

Salem

Group Comparisons
CFRP-Control/Comparison

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
A. Child Characteristics									
Focal child age	39	.43	.26	51	.32	.29	3.29	.07	NS
Firstborns (%)	39	51	—	51	41	—	.90	.35	NS
Focal child sex(% female)	39	62	—	51	47	—	1.86	.18	NS
Non-white (%)	38	11	—	49	18	—	1.02	.31	NS
B. Household Composition and Characteristics									
Mother's age (years)	39	22.92	5.31	51	22.90	3.60	.00	.98	NS
Teenage mothers (%)	39	13	—	51	4	—	2.45	.12	NS
'Marital Status'	38	.71	.46	51	.69	.47	.06	.81	NS
Family types (%)									
1. Two-parent	39	39	—	51	41	—	.07	.80	NS
2. Single-no other adults	39	41	—	51	41	—	.00	.99	NS
3. Single with child's grandparents	39	13	—	51	12	—	.02	.88	NS
4. Single with other unrelated adults	39	8	—	51	4	—	.59	.14	NS
Total household size	39	3.74	1.43	51	4.26	1.86	2.03	.16	NS
Total number of children	39	1.92	.98	51	2.29	1.39	2.01	.16	NS
Infants (0-3)	39	1.26	.44	51	1.33	.55	.51	.48	NS
Preschoolers (3-5)	39	.23	.49	51	.28	.53	.16	.69	NS
School age (5-18)	39	.44	.94	51	.67	1.07	1.14	.29	NS
C. Socioeconomic Status									
Per capita income ($1,000)	32	1.64	.75	38	1.78	.86	.53	.47	NS
'Income Sources'	37	-.35	.64	50	-.29	.95	.12	.73	NS
Welfare (%)	39	90	—	51	88	—	.05	.82	NS
Wages (%)	39	79	—	51	67	—	1.88	.17	NS
Mother's employment (%)	36	17	—	48	23	—	.50	.48	NS
Mother's education (% with H.S.)	39	59	—	51	61	—	.03	.86	NS
D. Other Family Circumstances									
Rental housing (%)	39	97	—	51	86	—	4.12	.05	NS
Subsidized housing (%)	39	33	—	51	25	—	.64	.43	NS
Years at present address	39	.64	.68	51	1.37	2.78	2.53	.12	NS
# moves in last 5 years	38	8.34	9.24	50	7.40	6.43	.32	.57	NS

*univariate t-test
**multiple t-test
' ' constructs

Salem

E. Birth Circumstances and Prenatal Care

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
# weeks pregnant at 1st doctor visit	38	11.26	6.10	50	11.26	6.20	.00	1.00	NS
Pregnancy complications (%)	39	21	——	51	29	——	.91	.34	NS
Difficult delivery (%)	38	23	——	51	35	——	1.56	.21	NS
High risk children (%)	39	33	——	51	33	——	.00	1.00	NS
F. Child Health									
Weight at birth	39	6.80	1.24	51	6.71	1.36	.11	.74	NS
Mother rating of weight	39	1.95	.46	51	1.92	.52	.07	.80	NS
# focal child doctor visits	39	5.56	6.09	50	5.88	5.45	.07	.80	NS
# reasons for doctor visits	39	2.10	1.29	51	2.14	.85	.02	.88	NS
# doctor visits older children in past year	19	4.24	5.71	30	1.88	2.94	3.62	.06	NS
Continuous health problems older children(%)	20	40	——	31	19	——	2.63	.11	NS
G. Maternal Health									
# doctor visits (other than prenatal care) in past year	39	1.90	4.38	50	1.86	2.38	.00	.96	NS
Serious continuous health problems (%)	39	21	——	51	25	——	.30	.59	NS
H. Health Care									
Medical insurance (%)	39	82	——	51	84	——	.08	.78	NS
Medicaid (%)	31	97	——	43	95	——	.09	.76	NS
# different health care facilities used	39	2.87	1.44	51	3.00	1.81	.13	.72	NS
Difficulty obtaining health care (%)	39	21	——	51	18	——	.12	.73	NS

*univariate t-test
**multiple t-test

Salem

I. Infant Temperament and Parent Comfort

	CFRP			CONTROL					
Variable	N	Mean	S.D.	N	Mean	S.D.	F	P*	P**
Predictability of baby hunger	39	3.54	1.52	51	4.00	1.43	2.16	.15	NS
Regularity of sleeping pattern	39	3.77	1.50	51	3.82	1.48	.03	.83	NS
Mood while eating	39	3.92	1.46	51	3.35	1.51	3.28	.07	NS
Mood while being dressed/diapered	38	3.50	1.52	51	4.06	1.42	3.13	.08	NS
Level of attention needed	39	2.97	.74	51	3.16	.73	1.35	.25	NS
Parent comfort	39	4.10	.93	51	3.61	1.01	5.76	.02	.02

J. Parent-Child Interactions

Mother can comfort child (%)	39	97	—	50	98	—	.03	.86	NS
Child interaction with males (%)	38	100	—	50	90	—	4.13	.05	NS
Importance of male interaction	38	1.53	.76	51	1.51	.83	.01	.92	NS

K. Aspirations

Baby's educational attainment	23	4.91	1.83	36	5.08	1.90	.12	.74	NS

*univariate t-test
**multiple t-test

Salem

L. Coping

Situations	CFRP			CONTROL					
	N	Mean	S.D	N	Mean	S.D	F	P*	P**
Hassles:									
Child care (%)	39	51	—	51	57	—	.27	.60	NS
Housing (%)	39	51	—	51	45	—	.34	.57	NS
Repairs (%)	39	41	—	51	57	—	2.22	.14	NS
Job (%)	39	31	—	48	19	—	1.64	.21	NS
Food/clothing (%)	39	67	—	51	51	—	2.28	.14	NS
Pay bills (%)	39	54	—	51	49	—	.20	.65	NS
Transportation (%)	39	51	—	51	59	—	.50	.48	NS
Public services (%)	38	11	—	51	25	—	3.53	.06	NS
Frequency hassled	37	.59	.31	48	.58	.26	.03	.87	NS

M. Use of Support

Sources of Support	N	Mean	S.D	N	Mean	S.D	F	P*	P**
Formal:									
Use clinics (%)	39	69	—	51	57	—	1.43	.24	NS
Use physician (%)	39	51	51	51	73	45	4.42	.04	NS
# agency visits	36	2.46	1.33	43	3.01	1.47	3.01	.09	NS
Advice from professionals or agencies	39	.26	.20	51	.44	.40	.46	.50	NS
Help from professionals or agencies	39	.31	.47	51	.31	.47	.004	.95	NS
Informal:									
Parent involvement (friends)	39	1.28	.76	51	1.20	.87	.25	.62	NS
Parent involvement (organized groups)	38	1.37	.91	51	1.12	.89	1.69	.20	NS
Person helpful	35	2.29	1.56	41	2.00	1.38	.72	.40	NS
Help with baby	31	2.74	.63	44	2.66	.71	.27	.61	NS
Help with older children	39	.44	.50	51	.39	.49	.17	.68	NS
Advice from family	39	.36	.49	51	.55	.50	3.25	.07	NS
Advice from friends	39	.33	.48	51	.14	.35	5.08	.02	NS
Help from family	39	.77	.43	51	.90	.30	3.00	.09	NS
Help from friends	39	.82	.39	51	.73	.45	1.10	.30	NS
Help from no one	39	.46	.51	51	.41	.50	.22	.64	NS

Appendix B

SAMPLE ATTRITION

In Chapter 1, a brief overview was presented concerning attrition from the study sample of families during the first six months of the CFRP evaluation. Various aspects of sample attrition are addressed in more detail in this Appendix, including original assumptions concerning attrition, possible reasons for attrition, periodic tracking of sample families, and strategies for reducing attrition in order to ensure adequate sample sizes throughout the course of the CFRP evaluation. The effects of fall to spring sample attrition on the comparability of the treatment and control/comparison group also are examined; tables summarizing group differences resulting from sample attrition are presented at the conclusion of this section.

Assumptions Concerning Attrition

At the initiation of the CFRP evaluation, it was assumed that attrition from the control comparison group would be greater than from the CFRP treatment group. This assumption was based on the fact that control comparison families will be ineligible for enrollment in Head Start until the focal child reaches Head Start age. At that time, control/comparison families will be permitted to enroll in Head Start but they will not receive the comprehensive services that are offered by CFRP. In addition, potential problems were envisioned with the tracking of families in the control/comparison group. This is a relatively simple and straightforward process in the CFRP group since the families are in contact with the program periodically.

Based on these assumptions, it was decided to recruit a total of 120 families per site for the CFRP evaluation, 40 to be randomly assigned to treatment and the remaining 80 to be part of the control/comparison group. As was noted in Chapter 1 (Section 1.3), recruiting goals were not fully met at all sites. The recruited sample consisted of 637 families, an average of 106 per site. The fall 1978 sample was smaller due to attrition which occurred between the time families were recruited and the start-up of baseline data collection. There were an average of 40 CFRP and 46 control/comparison families per site in the evaluation as of fall 1978.

The sample recruited for the evaluation included a group of families who had participated in Head Start. These families became part of the control/comparison group rather than being assigned randomly to either treatment or control. This decision was based on the rationale that CFRP and Head Start are not fully comparable in their focus and in the services they deliver to families. By assigning families with prior Head Start experience to the control group and by treating the Head Start group separately in subsequent analyses, it would have been possible to compare outcomes for the CFRP and Head Start groups. In subsequent discussions with officials at ACYF, however, it was pointed out that the assignment of Head Start families to the control/comparison group might obscure CFRP impact on families and children and make it difficult to detect differences between the CFRP and control/comparison groups. Based on these discussions, families with prior Head Start experience were excluded from the analytic sample and the study. (If families with Head Start experience had been randomly assigned to the two groups, they could have remained in the study, since such experience would have impacted on outcomes in both groups in the same way.) As was illustrated in Appendix A, the exclusion of this group of families does not appear to have affected group equivalency. In most respects, the two groups of families in the fall analytic sample are comparable on SES and other family characteristics, health status, and other outcome domains which are examined in this study.

The fall analytic sample consisted of 236 CFRP and 230 control/comparison families, an average of 39 and 38 families respectively at each site. In the event that assumptions about control/comparison group attrition rates were correct (i.e., higher attrition than for the treatment group), the control/comparison group samples might be extremely small or virtually nonexistent at the time the CFRP evaluation is scheduled to conclude. This would raise serious questions about the viability of this study as a longitudinal evaluation of CFRP.

Attrition Rates

Contrary to expectations, attrition from the control/comparison group was considerably lower than from the CFRP treatment group during the first six months of the evaluation. Attrition reached 15 percent for the control/comparison group and 20 percent for the CFRP treatment group, as noted in Table B-1. (It should be pointed out that the attrition rates shown in the table may not be totally accurate. A number of families in the fall sample could not be located for spring interviews. Some of these families are expected to re-enter the evaluation in fall 1979.) In the next two sections, possible reasons for differential attrition rates are examined.

Table B-1

Fall and Spring Sample Sizes and Sample Attrition By Site and Group

	CFRP		Control/ Comparison		Attrition	
	Fall	Spring	Fall	Spring	CFRP	Control
Jackson, MI	40	31*	24	20	25.0	16.7
Las Vegas, NV	42	32	43	33	23.8	23.3
New Haven, CT	36	28	20	18*	22.2	15.0
Oklahoma City, OK	39	32	49	45	17.9	8.2
St. Petersburg, FL	40	34*	43	40*	17.5	9.3
Salem, OR	39	31	51	42	20.5	17.6
TOTAL	236	186	230	198	20.3%	14.8%

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*Each of these numbers includes one family interviewed in the spring but not in the fall. The families were part of the random assignment but could not be reached in the fall.

CFRP attrition--It was expected that enrollment in the program would serve as an incentive for CFRP families to continue in the evaluation. This appears not to have been the case. Over half of the attrition in the CFRP sample was due to families dropping out of the program or refusing to participate in the study while still enrolled in the program. The dropout rate was highest in St. Petersburg and Oklahoma City; refusal to participate in the study by active CFRP families was highest in the Las Vegas and New Haven programs, as noted in Table B-2.

Table B-2

Major Reasons for CFRP Group
Attrition by Site

	Fall Sample	Dropped Out of Program	Refusal
Jackson	40	2.5	5.0
Las Vegas	42	2.4	14.3
New Haven	36	2.8	11.1
Oklahoma City	39	10.3	5.1
St. Petersburg	40	17.5	-
Salem	39	2.6	2.6
TOTAL	236	6.4%	6.4%

The relatively high dropout rate may be attributable to the approach used in recruiting families. Many families received only a brief explanation about CFRP and the study at the time of recruitment and did not have a clear understanding of the program, their participation in it, or benefits to be derived from the program. It is likely that a number of families decided to drop out when program objectives, goals, and program requirements for family participation were clarified. If this is the case, attrition due to families dropping out of the program is likely to decrease significantly in the coming years.

The relatively high rate of refusals to participate in the study by active CFRP families can be attributed to several factors:

- Baseline data collection with CFRP families required two lengthy interviews; a number of families complained about this.

- Control/comparison families were paid an incentive of $40 per year for participation in the study. A number of CFRP families, especially those who know families in the control/comparison group, demanded a similar incentive be paid to them. They refused to be interviewed because of perceived "inequity."
- Program staff do not appear to put sufficient pressure on families to continue in the study, as specified in the agreements families signed at the time of recruitment. In other evaluations sponsored by ACYF, some families were dropped out of the programs due to non-participation in a study.

In spring, an attempt was made to reduce the amount of time required for data collection and to give families more realistic estimates of what would be involved at each time point. Also, program staff were asked to take a more active role in attempting to reduce attrition by convincing families of the importance of their continued participation in the study.

During the first year of the evaluation, it became apparent that these actions could result in some reductions in sample attrition, but would not totally eliminate it. Some attrition is due to families moving away from the area or decisions by families that they no longer require the services of CFRP. The fact that families may wish to leave the program before their children enter Head Start or public school is consistent with the overall objectives and goals of CFRP, which gears program services to meet the needs of individual families. These needs are likely to change as a result of family participation in CFRP or due to other factors such as employment which can influence family circumstances. It would be unrealistic to expect all families to participate in the program until the study concludes.

The decision was made to permit natural attrition from the CFR program. Rather than dropping families from the evaluation who decide to leave the program, an attempt will be made to retain them in the study. Continued family participation in the study has the potential of providing valuable information to policymakers about length of treatment and associated benefits for different types of families. The feasibility of retaining CFRP families who no longer are in the program will be explored beginning in fall 1979.

Control/comparison attrition was somewhat lower than for the CFRP group. This is probably due to the fact that an incentive of $40 per year is paid to control/comparison group families for their continued participation in the study. Attrition in this group was due mostly to inability to locate families and refusals to participate, although the refusal rate was considerably lower than for the CFRP group. Table B-3 shows major reasons for control/comparison attrition by site.

Table B-3

Major Reasons for Control/Comparison Group Attrition by Site

	Fall Sample	Moved/Unable To Locate	Refusal
Jackson	24	12.5	-
Las Vegas	43	7.0	4.7
New Haven	20	5.0	5.0
Oklahoma City	49	4.1	-
St. Petersburg	43	4.7	4.7
Salem	51	13.7	-
TOTAL	230	7.8%	2.3%

In an attempt to minimize attrition problems, tracking of families is undertaken prior to each data collection phase. Tracking includes the following procedures:

- Families receive a letter from Abt Associates Inc. every six months and are asked to return a self-addressed, postage-prepaid postcard indicating their current address.
- Families are provided with an address change card so that they can notify Abt Associates Inc. of any changes as they occur.
- Half of the $40 incentive fee is paid for providing address information twice a year.
- If mail to families is undeliverable, site staff are assigned responsibility for on site tracking of families. A number of techniques are used: (a) They talk to neighbors at the previous address to find out where the family has moved; and (b) they contact social service agencies (such as AFDC) in an attempt to get address updates.

In the spring, an additional tracking procedure will be tried out in an attempt to minimize control/comparison group attrition. The plan calls for asking families for the name and address of a close relative or friend who could be contacted in the event the family moves without leaving a forwarding address. At this time it is difficult to assess whether families will be receptive to this plan.

Sample Attrition Effects

Attrition of families from a longitudinal study like the CFRP evaluation poses two distinct problems for analysis and the making of policy-relevant inferences. The first is that of the sample's generalizability. If attrition is selectively related to any characteristics of the families and children under study, then the sample(s) remaining for analysis cannot be considered to be "representative" of the population under examination. Although this is a potentially troublesome problem for policymaking (e.g., "Just what population will benefit from this program?"), it rarely poses a problem for an evaluation. Selective attrition alone does not usually affect the "internal validity" of any given research study.

The second problem posed by sample attrition is more complex and subtle, harder to detect and understand, and more problematic in its consequences. This is the problem of differentially selective attrition across important subsamples. In the CFRP evaluation, there are two subsamples per site--the CFRP treatment and control/comparison group. Selective attrition would affect the generalizability of impact study results, but it alone would not affect the validity of experimental impact analyses. Differentially selective attrition in these two groups, however, would call the validity of any tests of treatment effect into question by undermining the group equivalency assumption underlying such tests. If and where differentially selective attrition is detected, statistical adjustments for group nonequivalency will have to be developed and employed.

The extent to which differentially selective attrition occurred during the first six months of the CFRP evaluation was judged by examining the comparability of the two groups of families in the spring sample at each of the six impact study sites. Multiple t-tests by variable domain were conducted to detect within-site differences between the two groups as was done in initial baseline comparisons. Group differences that were found to be statistically significant in the spring sample were subsequently compared with fall sample group differences. In addition, significant differences detected in the fall sample were re-examined to ensure that no change had occurred due to sample attrition.

Sample attrition during the first six months of the evaluation appears not to have been differentially selective. Group differences and changes from fall to spring on baseline measures concerning all variable domains are summarized below:

- Family characteristics and SES. In Las Vegas, the group difference in focal child sex detected in the fall was no longer significant in the spring sample; this is not because of changes in relative proportions of males and females in the two groups, however, but because of reduced power due to smaller Ns. Differences on rental housing in Las Vegas remained unchanged. In St. Petersburg, significant spring differences were detected between the two groups of families in the percentage of single parents who live with no other adults; proportionally more families with other family structures attrited from the CFRP group ($p=.05$). The groups did not show differences on this variable in the fall, as is noted below.

		CFRP			Control/ Comparison				
		N	Mean	S.D.	N	Mean	S.D.	F	P
Las Vegas									
Focal child sex(% female)	(F)	42	35	-	43	67	-	7.85	<.01
	(S)	32	34	-	33	64	-	5.90	NS
Rental housing	(F)	42	.48	.89	43	-.12	1.01	8.27	<.01
	(S)	32	.56	.84	33	-.09	1.01	8.00	.02
St. Petersburg									
Single parents living with no other adults (%)	(F)	40	50	-	43	23	-	6.79	NS
	(S)	32	56	-	39	23	-	9.02	.05

- **Health**. Group differences in number of doctor visits by the mother remained unchanged in New Haven from fall to spring.

		CFRP			Control/ Comparison			
	N	Mean	S.D.	N	Mean	S.D.	F	P
New Haven								
Mother doctor (F)	36	.44	.94	20	1.55	2.50	5.66	.04
visits (S)	28	.36	.87	17	1.47	2.43	3.92	.06

- **Parent-child interaction**--Attrition also affected group comparability on parent-child interaction variables. Parent comfort differences detected in the fall in Salem and Oklahoma City no longer are statistically significant, primarily due to small Ns. A group difference emerged in New Haven in the spring on one infant temperament item: CFRP children appear to have more regular sleeping patterns (*p*=.02).

		CFRP			Control/ Comparison			
	N	Mean	S.D.	N	Mean	S.D.	F	P
Salem								
Parent (F)	39	4.10	.93	51	3.61	1.01	5.76	.02
comfort (S)	30	4.10	.93	42	3.80	.90	1.88	NS
Oklahoma City								
Parent (F)	39	3.28	.91	47	3.62	.86	3.03	.09
comfort (S)	32	3.27	.94	43	3.58	.82	2.31	NS
New Haven								
Regularity of sleeping (F)	36	4.00	1.43	19	3.26	1.52	3.04	NS
pattern (S)	28	4.25	1.32	16	2.94	1.44	9.00	.02

- Capacity for independence--Group equivalency on variables related to coping and use of support (formal or informal) was unchanged at all sites except Oklahoma City. In Oklahoma City differences between the groups emerged as a result of attrition in the proportion of families using private physicians (rather than clinics and hospitals) for medical services; fewer CFRP families use physicians.

		CFRP			Control/ Comparison				
		N	Mean	S.D.	N	Mean	S.D.	F	P
Oklahoma City									
Use of private physician (%)	(F)	39	23	-	49	41	-	3.13	NS
	(S)	32	16	-	45	42	-	6.53	.01

Group differences due to attrition from the sample will be statistically controlled to ensure that they neither create nor mask important impact study results. This will be done only for analyses where group differences appear to be relevant or have a potential impact on outcomes examined. It may not be appropriate, for example, to control for differences in the proportion of families who live in rental housing when comparing the two groups on parent-child interaction variables.

Strategies to Offset Attrition Effects

The higher-than-expected sample attrition which occurred during the first six months of the evaluation raises serious questions about its viability as a longitudinal study. If sample attrition continues at present rates each year until 1982--the time at which a full child test battery will be administered to sample children prior to their entry into Head Start--this will seriously reduce the probability of detecting program effects. Attrition and resultant small sample size will reduce analytic power in both the impact study, which compares the CFRP and non-CFRP groups, and in the in-depth study, where a sample size large enough to identify relationships among program process, types of families served, and outcomes is required.

During the course of the current phase of the evaluation, a proposal was sent to ACYF which, if adopted, would have bolstered sample sizes of both groups at the six CFRP impact study sites. The plan called for the recruitment of additional families in the summer of 1979 who would be randomly assigned to enter the treatment or control/comparison group in the fall. The focal children would be the same age as those currently in the evaluation sample. Through discussions with CFR programs, it was determined that this would be feasible if on-site staff could assist programs with the recruiting effort. Analytic plans called for the newly recruited families to be considered part of the original sample, although it would have been necessary to control for differing lengths of treatment. This proposal was not adopted by ACYF officials; their primary reason was the fact that the newly recruited families would not be comparable to those in the original groups because they would enter the evaluation with older children and, in the case of the CFRP sample, because they would not have received the first year of program services.

Appendix C

DESCRIPTION OF EVALUATION INSTRUMENTS

This Appendix describes the data-collection instruments which were used to obtain information for the CFRP evaluation. It is divided into three sections corresponding to the studies which comprise the evaluation--impact, in-depth, and program. Within each section, the instruments used to collect data for that study are described. The chart on the next page summarizes the data-collection activities.

The impact study was designed to identify changes or outcomes for families in CFRP compared with a group of families who are not participating in CFRP. The measures described in the first section of this Appendix were developed to collect data for the impact study.

The purpose of the in-depth study is to examine services and activities as part of CFRP treatment, and to examine the relationship between outcomes for families and these program processes. The instruments described in the second section of this Appendix collected data for this study.

The instruments described in the third section collected information for the program study of this evaluation. The purpose of the program study is to describe the characteristics of CFRP families and communities, staff and services.

Data-Collection Summary Chart

The following chart summarizes the data-collection activities for the three studies during the first year of the evaluation.

Frequency		Sub-study	Collected or provided by
Fall 1978	Spring 1979		
		Program Study	
X	X	Interviews with staff and observations of program activities during site visits to 6 impact study sites	AAI Cambridge staff
X	X	Telephone interviews with staff of 5 non-impact study sites	AAI Cambridge staff
X		Questionnaires about staff and family demographics	CFRP staff
		Impact Study	
X	X	Interviews with families: CFRP and comparison	AAI site staff
X		Health records of birth circumstances	AAI Cambridge staff
	X	Infant assessment (pilot test at 2 sites)	AAI site staff
	X	In-home observation (pilot test at 2 sites)	AAI site staff
		In-Depth Study	
X	X	Interviews with CFRP staff who work with study families	AAI site staff
X		Questionnaires about staff and family demographics	CFRP staff
X	X	Questionnaires about treatment for study families	CFRP staff
Every three months		Records of CFRP treatment (services and activities) for study families	CFRP staff

I. Impact Study Instruments

The two parent interviews described in this section collected information about family characteristics from CFRP and control/comparison families. Data were obtained on five outcome domains which CFRP is expected to influence. The first interview collected baseline data; the second was a follow-up interview conducted six months later.

Parent Interview 1

Administered fall 1978 to
CFRP and control/comparison
families

This instrument was designed to describe the characteristics of CFRP and control/comparison families at entry into the CFRP program and the evaluation. The interview focused on five outcome domains:

- Family circumstances (socioeconomic status and family background). These items helped to assess the degree to which the two groups of families are comparable in their characteristics. Examples of the types of data collected include the ages of the mother, children, and other household members, mother's employment status and years of education, total household income, sources of income, and housing circumstances.
- Maternal and child health. Data were collected about the birth circumstances and health of the infant and the presence of physical problems. Prenatal care, complications during the pregnancy, and health status of the mother, older children, and other household members also were addressed in the interview.
- Parent-child interaction. Variables within this domain include interaction between the mother and the focal child, as well as her interaction with older children. Information was gathered about infant temperament, such as regularity

of feeding and sleeping, reaction to separation, and fussiness. Related items assess the parent's perception of these characteristics as good or problematic and the parent's comfort in caring for the infant and being a parent. An attitudinal scale was administered to obtain information about child-rearing styles.* In addition, data were obtained about contacts with preschool programs or schools attended by older children.

- Child development and achievement. Data were obtained about the focal child's weight and parent expectations for child development and achievement.
- Capacity for independence. These items were developed to describe the family's existing patterns of participation in the community, locus of control and coping strategies, and affiliation with family and social networks. Examples of items included under this topic are questions concerning situations parents may perceive as problematic, such as making child care arrangements or funding new housing. Other questions concerned the nature of the parent's affiliation with family, friends, social groups, and agencies or professional people. In addition, items covered the parent's use of community resources and social service agencies.

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*The items included in the maternal attitude and locus-of-control section of the fall 1978 parent interview were the subject of an extensive but unsuccessful data-reduction effort. Locus-of-control items did not form a unique measure distinguishable from other components derived. Furthermore, the potential constructs that did arise were vaque and bore little or no resemblance to measures derived from analyses of similar items used in previous studies (of day care homes and infant day care centers). The CFRP data are not being considered further.

Parent Interview 3

Administered spring 1979 to
CFRP and control/comparison
families

Variables included in this questionnaire are for the most part repeat measures concerning the five outcome domains:

- Family circumstances. Repeat measures of demographic characteristics and socioeconomic status of the family, such as household size and membership, education and training, employment, sources of income, residential stability, and child care were collected in this interview.
- Maternal and child health. Repeat measures of health status were obtained. Items covered health problems, number of visits to clinics, hospitals, or physicians, and a rating of the child's health status.
- Child development and achievement. Data were collected about the focal child's height and weight.
- Capacity for independence. For this domain, parents were presented with certain specific situations, such as an emergency or need for child care, and asked to provide information on how they coped with the situation. Sources available to the mother for help in coping with economic problems and child-rearing situations were explored. Particular attention was paid to the use of services by families and the types of changes in family life the parent had experienced over the previous six months.
- Parent-child interaction. Data were collected concerning the child's temperament and parent comfort with the demands of child-rearing, child-rearing style, behavior of older children, and child interaction with other household members.

II. In-Depth Study Instruments

The nine instruments described in this section examine services delivered to families as part of CFRP treatment. These data were obtained through interviews with families and CFRP staff, as well as from program records of services, referrals, and family participation.

Parent Interview 2

Administered to CFRP
families, fall 1978

This instrument was developed to collect information from families entering CFRP about their experience and perceptions of CFRP in several areas:

- Parent participation in CFRP. Questions focused on the roles of parents and staff in the assessment process, goal-setting and attainment, and service delivery. Data were obtained concerning the parent's views of treatment, the division of responsibility for service delivery and program participation, and program emphasis on individualized service and family independence.
- Staff-family relationship/interaction. Items under this topic describe the parent's perspective on and role in the family-staff relationship.
- Parent characteristics and attitudes affecting participation. An attempt was made to identify aspects of family, community, or personal perceptions which can be associated with program participation and outcomes for families. Examples of items include the parent's acquaintance with others enrolled in CFRP, the family's use of non-CFRP resources, parent satisfaction with CFRP, and support of relatives and friends for the family's participation in CFRP.

Parent Interview 3

Appropriate section administered
spring 1979 to CFRP families

One section of Parent Interview 3 was administered only to CFRP families. Items covered family perceptions of their participation and experience in CFRP over the first six months. These questions concern level of family participation and the degree of control mothers have over activities available through the program.

Family Review Interview 1

Administered fall 1978 to
CFRP staff

This questionnaire was designed to collect information about CFRP families from the CFRP staff who work most closely with them, as well as about CFRP treatment for those families.

- Goals, activities, and services. Specific items address the types of CFRP activities family members are involved in, the frequency of their participation, and the assessment and goal-setting processes. In addition, the services each family received are examined. Individualization is looked at in terms of the frequency and duration of home visits, family needs and goals, and the services the family received.
- Roles of family and staff. Specific items under this topic describe the number of staff involved in service delivery, the roles of family and staff in the intake/enrollment and assessment/goal-setting processes, and the division of responsibilities between staff and family for program participation and service delivery.
- Staff perception of families. The questions cover a broad spectrum of family needs and characteristics and strengths and weaknesses, as well as how the family was recruited, staff estimations of family support of mothers' participation in CFRP activities, and family activities in CFRP.

- Staff perception of infant temperament. Staff were asked questions about infant temperament and parent response to the child. The same attitude scale was administered to parents in fall and spring parent interviews in order to examine the extent to which parents and staff hold congruent views.

Family Review Interview 2

Administered in spring 1979
to CFRP staff

This interview was intended to collect information about: (1) the kind and amount of supervision and support that staff receive in their work with families, and (2) family participation and changes over six months in CFRP.

- Supervision and support. These questions included the amount of supervision staff receive in relation to their work with individual families and the relative flexibility/restrictiveness that staff face.
- Program participation and progress. Specific items under this topic concerned frequency of contact with each family, types of activities emphasized, individualization of program services for the family, progress indicators, and independence of the family. Other items concerning staff-family relationship and family support of program involvement were repeated from Family Review Interview 1.

Baseline Data Questionnaire

Self-administered by CFRP
staff in July 1979

The purpose of this questionnaire was to collect baseline data on such variables as infant temperament and parent response and the assessment and goal-setting process. Most of these questions were asked in fall 1978, but at some sites staff had not yet had sufficient contact with families to enable them to answer these questions. For information about specific items, refer to infant temperament, assessment, and goal-setting under the description of Family Review Interview 1.

Staff Background Questionnaire

Collected from all
CFRP staff fall 1978
and new staff as hired

This questionnaire was designed to collect data about CFRP staff concerning demographic and background characteristics, education and training, and past work experience. Additional descriptors were collected about staff responsibilities and functions in CFRP and their involvement in other programs such as Head Start. Staff views on child-rearing practices were also obtained.

Participation Record and Goal Attainment Form

These forms were developed to collect data from program staff at quarterly intervals about the participation of CFRP families in various program activities, goal attainment, and services obtained through the program. Records are kept up-to-date by staff who work directly with the family.

- Family Participation Record. This instrument notes the incidence of parent and child participation in home-based and center-based CFRP activities such as infant-toddler sessions or parent meetings, and instances of staff contact or work with families such as home visits. Additional information is collected about referrals made for the family and direct services the family receives from program staff.

- Goal Attainment Form. This instrument notes the types of goals set and the steps required to attain them, the role of staff and family in setting and attaining goals, the nature of goals set, and such characteristics as short-term vs. on-going and what family member was the focus of the goal.

Subsequent problems and modifications. During the fall 1978 visits, CFRP staff were trained to keep these records. After the records had been maintained for six months, discussions were conducted with staff about the utility and relevance of the data collected to the typical service provided in CFRP, as well as to the purposes of the evaluation. The major concern of staff was that the forms did not completely reflect the work they do with families in the areas of direct services, the content of home visits, and telephone contact with families. In addition, staff felt that not enough space was provided for noting special circumstances that affect the family's participation in the program and/or goal attainment. In response to these concerns, a Direct Service Sheet was added to the Record, which records services provided directly to families by CFRP staff, such as transportation, child care, or emergency food/financial assistance. The Goal Attainment Form was also modified to include a column in which to record any unusual family circumstances related to goal attainment. Following these instrument descriptions is a sample record and set of instructions.

III. Program Study Instruments

These instruments were developed to give an overall picture of the operations and policies of the CFR programs. Data were collected through interviews with program staff in the six CFR programs that participate in the impact study during site visits conducted in the fall of 1978 and spring 1979. Limited information also was collected from the five non-impact study sites during telephone interviews in the fall of 1978. An asterisk (*) next to the instrument title indicates those that were administered to staff in the non-impact study.

Staff Profile Questionnaire*

Administered to CFRP directors,
fall 1978

- This questionnaire was developed to describe the staffing patterns of each CFRP and the relationships between staff. Specific questions concern the degree to which staff have overlapping functions, the amount of time staff devote to these functions, and staff salaries. An organizational chart for each CFRP was developed as part of this interview.

Staff Functions Update

Administered to CFRP
directors, spring 1979

- From the fall interview we learned that staff work in a variety of ways to improve family functioning. In some sites staff work in teams, in others one staff member is primarily responsible for a family. This questionnaire was designed to note any changes or developments in this process. Other items describe the coordination of referrals for families.

Assessment Questionnaire*

Administered to CFRP
directors, fall 1978

- The purpose of this questionnaire was to describe broadly the policies concerning the assessment process from start to finish, the roles of family and staff in the process, and how this process had evolved over the previous two years.

Assessment Update

Administered to CFRP
directors, spring 1979

- This questionnaire was designed to note any changes in the assessment or reassessment process over the previous six months.

Community Profile Questionnaire*

Administered to CFRP directors,
fall 1978

- This questionnaire was designed to describe the community context in which the CFRPs operate. Demographic descriptions of each community were obtained, including size of community and ethnic characteristics, major industries and local unemployment rate, as well as community problems such as gaps in service delivery systems.

Staff Recruitment Questionnaire

Administered to CFRP directors,
fall 1978

- CFRP policies concerning the recruitment and hiring of new staff were examined through this questionnaire. Information was gathered about the recruitment process and hiring criteria. In addition, staff attrition over the previous two years was examined.

Staff Training Questionnaire*

Administered to CFRP directors,
fall 1978

- The purpose of this questionnaire was to determine the training procedures used for newly hired staff in various capacities. Specific information was collected about the format and length of training, topics and training methods used, and the persons responsible for training.

Supervision Questionnaire II

Administered to staff supervisors
or coordinators, fall 1978

- This questionnaire was designed to learn the procedures by which direct service staff are supervised. Specific items address the types of procedures used and frequency of supervision. Other data collected focused on how staff are trained in program philosophy, and policies regarding the responsibilities and roles of staff and families in goal attainment and in encouraging family independence.

Staff Supervision Questionnaire*

Administered to CFRP directors,
fall 1978

- These questions were intended to determine who has responsibility for supervision and policies concerning supervision in terms of frequency and methods. Procedures for performance evaluation were also covered, including frequency of evaluations, and follow-up.

Family Recruiting Questionnaire*

Administered to CFRP directors,
fall 1978

- This questionnaire was developed to describe CFRP procedures for recruiting families. Specific questions focus on frequency and recruitment sources, as well as the process used to recruit the CFRP evaluation families. In addition, attrition among newly recruited families was examined.

Families Served I

Administered to CFRP directors,
spring 1979

- From the fall 1978 site visits it was apparent that the CFRP families vary in their needs for program services and level of involvement in the program. Specific information was collected about program policies concerning the status of "as-needed" families, the criteria used to identify these families, and the length of time families can be served on this basis. Questions also focused on the type of records kept on these families and the possibilities of collecting data on "as-needed" families regularly. Policies regarding the enrollment and termination of full-service families also were reviewed.

Families Served II

Administered to home visitors/
family advocates, spring 1979

- This questionnaire was developed as follow-up to Families Served I, focusing on the actual implementation of program policies about working with irregularly served families, and how staff respond to the needs of families served in a crisis situation or on an "as-needed" basis.

Data collected include the number of families served by staff on this basis, types of services rendered, frequency of contact, and records kept. Data were also collected on the length of time staff work with these families, staff perceptions of how relationships differ, and drawbacks to working with families on this basis.

Family Advocate & Home Visitor Questionnaire

Administered to home visitors/
family advocates, fall 1978.

- The purpose of this questionnaire is to identify how these staff generally work with families and perform their job functions. Specific information was collected about problems staff frequently work with, other agencies consulted, and how often supervisors are consulted about family progress. Other data were collected about program goals that influence how staff work with families. Additional information was also collected about staff impressions of how the families recruited for the evaluation differ from other families they work with in terms of their relative strengths and weaknesses.

Home Visit Questionnaire

Administered to home visiting staff,
fall 1978

- This questionnaire was designed to determine the frequency of home visits, and their focus and structure. A Home Visit Checklist was prepared for use during home visit observations. The checklist recorded information regarding materials brought into the home, the objective of the visit, and a general description of the activities and interactions that occured.

Coordination with Families Questionnaire

Administered to staff supervisors and coordinators, fall 1978

- This questionnaire was designed to learn the process by which program activities are coordinated for families and how supervisors monitor a family's progress in CFRP. Specific questions focus on the process of staff assignment--particularly characteristics used for "matching," resolution of conflicts between staff and families, and the type of conflicts that most frequently occur.

Coordination with Agencies Questionnaire

Administered to staff supervisors or coordinators, fall 1978

- The purpose of this questionnaire was to describe the relationship between CFRP and other community agencies. Specific questions describe how these relationships developed and difficulties staff may have experienced in establishing them. Their relationship with three specific agencies was examined in depth in terms of referral exchange, staff relationships, and family use of agency resources.

Parent Involvement Questionnaire*

Administered to staff responsible for coordinating parent involvement for CFRP, fall 1978

- This questionnaire was developed to describe the types of parent involvement opportunities available in CFRP and how parent involvement is encouraged through program policies and structure. The role of the parent advisory council was examined in terms of the selection process, programs represented, and issues regularly addressed. The problem of inadequate parent participation was addressed, as well as techniques used by programs to increase parent participation.

Health Specialist Questionnaire*

Administered to CFRP health
coordinator, fall 1978

- This questionnaire describes the types of health services and activities provided families through CFRP. Data were collected about the types of health problems the health specialist commonly deals with, as well as those emphasized in staff training or parent education sessions. Other data were collected about the involvement of the health specialist in assessment, goal-setting, and home visits. Referrals were covered in terms of their type, frequency, and commonly used referral sources.

Infant-Toddler Specialist Questionnaire*

Administered to CFRP infant-toddler
specialist, fall 1978

- General information was collected about the structure, staffing, and goals of the infant-toddler component. Specific data were collected about the frequency of meetings, types of activities, curriculum and materials used, and degree of family involvement in these meetings. Home visits were described in terms of the continuity between center and home-based activities. Also described were the interactions between component staff and other staff who work with families.

Infant-Toddler Update

Administered to CFRP Infant-Toddler
specialist, spring 1979

- From the fall interview concerning this component, it was difficult to discern important differences among programs. This questionnaire was designed to discern the distinguishing features of each component, as well as note changes or developments over the previous six months. Infant-toddler sessions were examined in terms of the focus of the meeting (parent versus child), the curriculum, and teaching methods that work best for program staff.

Preschool-School Linkage (PSL) Coordinator Questionnaire

Administered to CFRP staff responsible
for PSL coordination, fall 1978

- This questionnaire was designed to describe the overall goals of the PSL component, including planning, start-up, and present state of operations. Specific data were collected about how children and families are prepared for the child's entry into school, the relationship between programs and school, and how staff facilitate transition from preschool to school.

Preschool-School Linkage (PSL) Component Update

Administered to CFRP staff responsible for
PSL coordination, spring 1979

- From the information obtained in the fall PSL questionnaire, it was evident that the PSL components across sites were in various stages of development ranging from start-up to fully operational. In the spring, specific questions focused on new developments or changes in the components' structure or activities and on problems the components experienced in start-up. As an additional way of understanding the extent of PSL services provided by each program, the records of five families who had been receiving services since September 1977 were reviewed and discussed with staff who had worked with the families.

GOAL ATTAINMENT AND FAMILY PARTICIPATION RECORD

Purpose

The CFRP evaluation is designed to find out how effective the program is in helping and working with families who have young children. CFRP is a unique program because it builds upon the strengths of each individual family, and services are tailored to meet each family's needs. As a result, each family in CFRP is likely to receive different services. Similarly, they may participate in a different mix of program activities.

In order for us to evaluate CFRP, we must have a clear understanding of how the program is individualized for families. We need to know what goals are set with the family, how they are set and accomplished, what services are provided by CFRP staff or outside agencies, and what program activities the family participates in. In the evaluation, we will be looking at changes for families in five broad areas: family circumstances, maternal and child health, coping and contact with famly and social networks, use of community resources, and eventually, child status and achievement. We expect that families will change in different areas depending on where they are, when they enter CFRP, what they want from CFRP and what CFRP offers them. If we are to evaluate what role CFRP has in the changes that occur in families, we must know in which areas the program is working with each family.

By collecting information about goals and activities the family participates in, we will be able to identify the areas CFRP staff emphasize with families and see whether these are the same areas in which we see change in the family. For example, among the questions we ask every six months are questions about the mother's participation in educational activities for herself. For several families we may see no changes in the mother's participation in these types of activities. By looking at the goals for those families, we know that educational activities were not among the goals identified by this family and therefore change should not be expected in this area as a result of CFRP's efforts. Without knowing the goals we might conclude that CFRP did not help those same mothers with educational opportunities.

The attached goal attainment and family participation record provides important information for the evaluation when used with the information from interviews with families and staff. In filling out the forms, please rememeber how important this information is to give us a full understanding of CFRP and your efforts on behalf of families. Please make sure the records accurately reflect the goals of each evaluation family and the activities the family participates in. Feel free to give us additional information on the back of the form if you feel the records do not give us a complete picture of families' circumstances and your work with them.

General Instructions

The Goal Attainment and Family Participation Record should be completed for all CFRP families who are involved in the evaluation. The record provides information for a three-month period. The first reporting period for the second year, starts on October 1, 1979 and ends on December 31, 1979. The remaining report periods run from:

- January 1 - March 31, 1980
- April 1 - June 30 , 1980
- July 1 - September 30, 1980
- October 1 - December 31, 1980

Entries should be made on the forms once a week or whenever staff have contact with the family.

Family Participation Record

On this form, we want information about the family's participation in CFRP activities. Since most families will be in contact with several CFRP staff members, the information about the family's aprticipation in CFRP is likely to come from more than one source. Work out a record-keeping system with staff who are in contact with families so that information about the family's participation is kept and recorded on a regular basis.

Record the name of the child and mother at the top of the page as well as your own name, title and site. The form should be completed by the person who has principal responsibility for working with the family, such as the family advocate or home visitor.

Center-based activities. On the first page of the form, we want to get information about the center-based activities of preschool-age children in the family. You should only record information here on children who attend the center at least two times per week and the parent does not have to be there with the child. Information on an infant who participates in the infant-toddler program with the mother would not be included on the first page of the form if the parent is required to be present for the sessions.

For each child who attends a center, whether it is a Head Start, an Infant Toddler Day Care Center, or another center not associated with CFRP, we want to know the name of the child, the child's age, and the type of program the child is involved with. If the center is not affiliated with CFRP, please give us the name of the center and describe what kind of program it is (day care center, nursery school, etc.). We also want to know whether the child goes to the center for the entire day (full) or for only part of the day, and the number of days per week the child is involved in center-based activities.

Only record information on children who go to the center at least twice a week and the parent is not required to be present.

On the second page of the form, we are asking for information about contacts CFRP staff have had with the family and/or child.

Home visits. First, we want to know how many times staff from CFRP made visits to the family's home. Indicate who made the visit (the family advocate, the home visitor, or the infant-toddler specialist). If someone else from CFRP visited the family, please write in the title of the person who made the visit under "other." In parentheses, we also want you to record the total number of hours each CFRP staff member spent with the family in the home.

An example of how the information should be recorded follows:

HOME VISITS (RECORD # OF VISITS AND # HOURS IN HOME) - Family Advocate			
- Home Visitor		1 (1.5)	
- I-T Specialist			
- Other (specify)		1 (0.5)	

Both the Home Visitor and the nutritionist made one visit. The Home Visitor was with the family for an hour and a half; the nutritionist was there for only 25 minutes. Note that the number of hours in the example was rounded off to the nearest half hour.

Infant Toddler Sessions Involving Parent/Child. Record here the total number of sessions the parent and child attend each week.

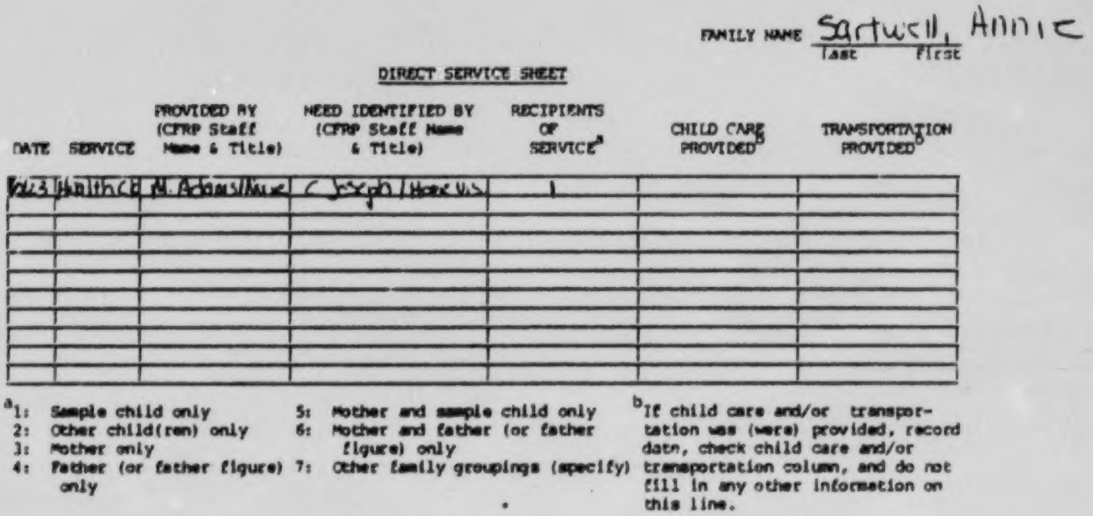
Parent Education Classes and Workshops. Record here the number of classes or workshops the parent attended. Include only classes or workshopss provided by CFRP. For example, if CFRP has asked the Red Cross to give a course for CFRP parents on home safety, you would not record that information here but on page 4 which asks for details about referrals made and services the fmaily received. In the event that both the father and mother in this family attended a workshop, record this as one session, not as two. We are interested primarily in what services this family received.

Parent Meetings and Parent Policy Council. Record the number of meetings that the family participated in regardless of whether one or two parents attended. If a workshop was given as part f a regularly scheduled parent meeting, this should be counted as a "workshop" and not a parent meeting. Make sure that you do not double count, for example, record one meeting both under workshop and parent meeting. Use fractions if the meeting has more than one focus.

Critical Events or Circumstances. We simply want to know if there was anything that affected the family's participation in the program. You would record information about a serious illness of a child, for example, which made it impossible for the family to participate in any workshops, policy or social activities. Another example would be the family being away due to a death of a relative for several weeks out of the reporting period or the parent working or going to school full-time. This would explain why the family was involved in only a limited number of program activities.

Page 3 of the form is the Direct Service Sheet. Please complete this form as direct services are provided by CFRP staff to any family members. These services can include transportation, child care, counseling, emergency financial or food assistance, etc.

Indicate the date the service was received, the type of service, by whom the service was provided, and by whom the need for service was identified. In the next column, record the recipient of the service using codes 1-7 at the bottom of the page, referred to by the letter "a." If child care and/or transportation was the service provided, record the date, check the child care and/or transportation column and do not fill in any other information on this line. Please note the following example:



FAMILY NAME Sartwell, Annie
Last First

DIRECT SERVICE SHEET

DATE	SERVICE	PROVIDED BY (CFRP Staff Name & Title)	NEED IDENTIFIED BY (CFRP Staff Name & Title)	RECIPIENTS OF SERVICE[a]	CHILD CARE PROVIDED[b]	TRANSPORTATION PROVIDED[b]
10/23	Health Ck	M. Adams/Nurse	C Joseph / Home V.S.	1		

[a] 1: Sample child only
2: Other child(ren) only
3: Mother only
4: Father (or father figure) only
5: Mother and sample child only
6: Mother and father (or father figure) only
7: Other family groupings (specify)

[b] If child care and/or transportation was (were) provided, record date, check child care and/or transportation column, and do not fill in any other information on this line.

The next page of the form is the Referral Sheet. Please fill out this form as referrals are made or you find out from the family that they have received the services. A referral can be made in basically two ways:

- CFRP staff calls the agency to set up an appointment for the family to receive services; or
- CFRP staff tells the family about the agency and asks the parent to call for an appointment. If the Family Advocate simply shared information about legal services or a new type of program with the family just to tell them about it, not because they have a need, you should not consider this a referral. Only if the parent is asked to call the agency to arrange for services.)

First, indicate the date on which the referral was made. Next, we want to know which agency the family was referred to. Please do not use abbreviations such as DHR (Department of Human Resources); write out the name of the agency as well as the specific department within that agency, such as Welfare Office, Food Stamps, and so on.

In addition to finding out about the agency, we want to know what type of service the family was referred for and for which member of the family (father, mother, other live-in relatives, child, and so on). If the referral was made for one of the children, please give us the name of the child.

If more than one family member is referred for the same services, record this as follows on the form:

FAMILY NAME: BRADY, LOIS

EXAMPLE
REFERRAL SHEET

				SERVICES PROVIDED (Check if yes)				
DATE OF REFERRAL	AGENCY REFERRED TO	SERVICE REFERRED FOR	RECIPIENT OF SERVICES	Transportation	Child Care	Other	DATE SERVICE RECEIVED	ONGOING
10/6	County Hosp.	Physical	Child (John)	✓			10/18	
		"	Child (Mary)	✓			10/18	
		"	Child (Lisa)	✓			10/18	

Whether CFRP staff provided transportation to help the family obtain the services they were referred for is recorded in the next column. Check this column only if the CFRP staff member accompanied the parent or made arrangements for the family to have someone else get them to the agency. This might be a bus driver from the Head Start center or a CETA worker. Do not check this column if the parent made her own transportation arrangements.

Record in the next column the date on which the family member(s) received the services. If the services are on-going, for example counseling sessions at a mental health clinic, record the date of the first session and place a checkmark under "on-going."

Goal Attainment

The goal attainment record consists of two parts: a form on which to record short-term goals and another form for long-term goals. Short-term goals are those which are expected to take less than one year to accomplish or complete. Include on this form only goals that you discussed with your family and agreed upon together as a goal. Do not include any goals you may have for the family, such as improving their financial situation or increasing parent-child interaction, if the family has not agreed to these goals. Goals such as the ones mentioned above should be included on your long-term goals form. Also included on the long-term goals that were agreed upon with the family which are expected to take more than one year to complete.

From the goal information you provide, we will get an idea about:

- the health of members of the family--both for adults and the children. Nutrition and hygiene goals will be included in this category.
- the status of children in the family (not related to their health). Examples are the developmental growth of children, discipline or toilet training problems, or problems older children are experiencing in school.
- parent-child interaction may include goals that help parents cope with children, increase or improve how parents and children interact, or child behavior management.
- family and life circumstances may include goals about housing adult education or training, employment, and obtaining financial aid.
- coping and affiliation of the family with friends, relatives and social groups. Goals that help parents better cope with their life or decrease their feelings of isolation would be included here. Examples are family counseling session, participation in Parents Without Partners or Parents Anonymous.

Part of the purpose of CFRP is to help families over the long term. As you continue to work with each family more and more long term goals may emerge. There may be some things everyone would like to see for their families such as some of the things mentioned earlier in this section.

Other long- or short-term goals might be: (1) to help the family become more independent in getting services that family members require; (2) to help the family become more active in CFRP and participate more frequently in program activities; and (3) to have families follow through with referrals and keep appointments. Goals like these should be included on the goal attainment form if they apply to one or more of the families you serve. This information is important in helping us evaluate and understand CFRP.

In summary, you only write down goals on the short-term form if the goal was agreed upon with the family and the goal is expected to take less than one year to accomplish or complete. Goals that will require more than one year are recorded on the long-term form. On this form you also include goals you may want the family to reach although you have not discussed this yet with the family.

Short-term Goal Attainment Form Instruction

Goal

Each Goal should be numbered sequentially. The reporting period starting October 1, 1979 begins Year 2 of these records. New goals should not begin with #1, but should continue from the fourth quarter of Year 1 goal attainment forms. For example, if in the fourth quarter the last goal set for the family was #7, the first new goal set in first quarter of Year 2 should be #8. Thus, if a family stays in the program a number of years and 86 goals are set during that time, the last goal would be #86. Each quarter, when you begin a new set of these forms, you will enter onto that new set those goals on the old set which were not completed or dropped.

When a goal is brought forward, give it its original number. For example, if Goal #8 is set during the first time period (October 1, 1979-December 31, 1979) and is not completed or dropped during that time period, then it will be entered onto the form for the next time period (January 1, 1980-March 31, 1980) and it will be identified as #8.

Make sure your description of the goal gives us a clear understanding of that goal. For example, if a goal is described as simply "home visits" or "home base," it is difficult for us to determine what that means. That goal could be referring to anything from a specific aspect of parent and child interaction you were working on to having the parent participate in home visits. Also, make sure to indicate when that goal was set and who it was for.

Step #____

Within each goal, the steps to attain the goal should be numbered, beginning with #1 for each different goal. Thus, for example, Goal #2 may have three steps (1, 2, and 3), and Goal #3 may have two steps (1, and 2)

If a goal is carried forward from one time period to the next, then some of the steps will be carried forward also. Thus, for example, it might be that Steps #1 and #3 of Goal #2 above were completed during time period 1, but that Step#2 was not completed. Under the entry for Goal #2 for the second time period, only Step #2 would be entered. Remember, the last step for each goal should be the completion of the goal.

LEVEL OF STAFF ASSISTANCE

There are two columns to be filled out for level of staff assistance. The first tells us what staff did, for example, shared information or made a referral on behalf of the family. The second column marked "family" tells us about the parents involvement in accomplishing the goal, for example, she follows through without any assistance from staff. Use only one code to indicate the level of assistance staff provided. If staff provides assistance in more than one way, determine what form of assistance best describes staff efforts. For example, the family advocate and mother talk about the child's vision. The FA encourages the mother to have it checked and they talk about what will be involved. The FA recommends a clinic that checks vision free of charge and calls the clinic for an appointment. "Staff assists in referral" (2) should be checked, rather than (1) and (2).

The same procedure should be used for the family column. If the mother has begun to perform the activity on a regular basis with little or no follow-up on the part of the staff, you should place a "1" in the family column. If, on the other hand, staff has to constantly remind the mother to spend time with each child, then a "2" is placed in that column. Write in N/A (not applicable) if the goal is one-time in nature.

DATE

Expected Date of Completion

In this column print the date at which time the step is expected to be accomplished. This information is of critical importance to the evaluation since it will help us understand why a family is concentrating on one goal at the time we interview them, rather than working on a number of different goals at the same time. It also will tell us whether the goals that are set and the time period for reaching the goals are realistic.

Dropped

For one-time and ongoing goals and steps: If a goal or step to attain a goal is dropped (but not successfully completed) print the date that it was dropped. In some cases, such a dropping may be an agreed-upon event and the date is easily determined. In other cases, the dropping may occur through inertia and general ignoring of the goal or step over a long period of time. In the latter case, simply mark the date when the staff member considered that it was not longer a goal or step being worked on.

Completed

For one-time goals and steps: Print the date at which the goal or step was accomplished.

For ongoing goals and steps: The time of completion for some on-going goals or steps (such as checking newspapers daily when looking for a job) will be obvious. For others (such as spending time with each child individually at least once a week) the time of completion is not obvious. Such a goal probably is considered completed when it has become a habit and is no longer checked on by staff members.

Locus of Goal

Record here whether the goal arose from a specific family need or whether it is a type of goal that is emphasized in the program and for most families.

New Developments Related to Goal Attainment

Use this column to record any circumstances that may have a bearing on goal attainment. For example, mother becomes pregnant, is hospitalized, etc.

Family Name: ______________________________
Last First

FAMILY PARTICIPATION RECORD

	OCTOBER				NOVEMBER				DECEMBER				
	10/6	10/13	10/20	10/27	11/3	11/10	11/17	11/24	12/1	12/8	12/15	12/22	12/29
HOME VISITS (RECORD # OF VISITS AND # OF HOURS IN HOME) - Family Advocate													
- Home Visitor													
- I-T Specialist													
- Other (Specify)													
INFANT-TODDLER SESSIONS, INVOLVING PARENT AND CHILD # Sessions Attended													
PARENT EDUCATION CLASSES, WORKSHOPS # Meetings Attended													
PARENT MEETINGS AND PARENT POLICY COUNCIL # Meetings Attended													
SPECIAL OR SOCIAL ACTIVITIES SPONSORED BY THE PROGRAM (picnics, bake sales, etc.) # Activities Participated in													
Volunteer (Hrs.)													

DO NOT DOUBLE COUNT--USE FRACTIONS IF MEETING HAS MORE THAN ONE FOCUS.

Policy Council Member ______

Circumstances affecting family participation: ______________________________

Long-term Goals

Record on this page goals which are expected to take more than one year to complete. Also include goals you may want the family to reach although you have not discussed this yet with the family.

In the first column, give a brief description of the goal. Indicate who the goal is for, the date the goal was set, and the date it is expected to be completed. Next, check whether the goal was initiated by staff or family. In the third column list any short term goals that are associated with the long term goal. Finally, list in the last column any indicator of progress you are looking for to demonstrate progress towards completion of the goal. These could include the parent showing initiative or taking responsibility for certain critical functions, parent steadily going to classes, etc.

Make sure that for each step you have completed all of the appropriate columns. There should be information in:

Goals Description - brief description of the goal.

Level of Staff Assistance - record information in staff and family columns.

Date - complete the set and expected to complete columns when a goal is set and additional columns if the goal is dropped or has been completed.

Locus of Goal - one column checked.

New Developments Related to Goal Attainment - complete when appropriate.

Summary

Make sure that for each goal you have given a clear description of the goal and have indicated who the goal is for and the date set. For each step all the appropriate columns should be checked. Make sure you indicated who the goal was initiated by, the locus of the goal, and any new developments related to goal attainment.

SAMPLE

SITE: ____________________

FAMILY PARTICIPATION RECORD

YEAR TWO

CIRCLE QUARTER:

I	October 1 -December 31
II	January 1 - March 31
III	April 1- June 30
IV	July 1 - September 30

CHILD'S NAME: ____________________ Last First

FAMILY NAME: ____________________ Last First

STAFF ASSIGNED TO FAMILY (AND TITLE) ____________________ Last First

CENTER-BASED ACTIVITIES

- ARE THE PRESCHOOL AGE CHILDREN IN THIS FAMILY PARTICIPATING IN CENTER-BASED ACTIVITIES ON A REGULAR BASIS (AT LEAST TWO TIMES PER WEEK)? Include only center-based activities at which the parent is not required to be present.

X yes ___ no

- IF YES, PLEASE INDICATE WHICH CHILDREN, THEIR AGES, THE TYPE OF PROGRAM THEY PARTICIPATE IN AND HOW FREQUENTLY.

Name of Child	Age of Child	Type of Program*	Full/Part Day	# Days Per Week
Eric	3	Kiddy Kastle DAYCARE (OT)	FULL	5
CRISTINA	18 mos.	Kiddy Kastle DAYCARE (OT)	Full	5

*IT = Infant Toddler Day Care Center
HS = Head Start Center-based
OT = Other Center-based program (please specify)

Family Name: ______________________________
Last First

FAMILY PARTICIPATION RECORD

	January				February				March				
	1/5	1/12	1/19	1/26	2/2	2/9	2/16	2/23	3/1	3/8	3/15	3/22	3/29
HOME VISITS (RECORD # OF VISITS AND # OF HOURS IN HOME) - Family Advocate													
- Home Visitor			1-1hr			1 hr.			1 HR	1½hr.			
- I-T Specialist													
- Other (Specify)													
INFANT-TODDLER SESSIONS, INVOLVING PARENT AND CHILD # Sessions Attended													
PARENT EDUCATION CLASSES, WORKSHOPS # Meetings Attended					1-2½hr								
PARENT MEETINGS AND PARENT POLICY COUNCIL # Meetings Attended													
SPECIAL OR SOCIAL ACTIVITIES SPONSORED BY THE PROGRAM (picnics, bake sales, etc.) # Activities Participated in													
Volunteer (Hrs.)													

DO NOT DOUBLE COUNT--USE FRACTIONS IF MEETING HAS MORE THAN ONE FOCUS.

Policy Council Member ________

Circumstances affecting family participation: Mother has new job - works 10-6.

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FAMILY NAME: ______________________
Last First

REFERRAL SHEET

SERVICE PROVIDED
(Check if yes)

DATE OF REFERRAL	AGENCY REFERRED TO	SERVICE REFERRED FOR	RECIPIENT OF SERVICES	TRANSPORTATION	CHILD CARE	OTHER	DATE SERVICE RECEIVED	ONGOING
2-13-79	Associated FAMILY COUNSELING	FAMILY COUNSELING	MOTHER	✓			2-20-79	✓
3-10-79	STATE WELFARE DEPT.	FOODSTAMPS	MOTHER				3-15-79	✓

FAMILY NAME: ______________
Last First

DIRECT SERVICE SHEET

DATE	SERVICE	PROVIDED BY (CFRP Staff Name/title)	NEED IDENTIFIED BY (CFRP Staff Name/title)	RECIPIENT OF SERVICE[a]	CHILD CARE PROVIDED[b]	TRANSPORTATION PROVIDED[b]
2-15-79	Emergency Food ass't.	Betty Brown/Home visitor	Betty Brown/Home	5		

[a] 1: Sample child only
2: Other child(ren only
3: Mother only
4: Father (or father figure) only
5: Mother and sample child only
6: Mother and father (or father figure) only
7: Other family grouping (specify)

[b] If child care and/or transportation service(s) was (were) provided, record date, check child care and/or transportation column, and do not fill in any other information on this line.

FAMILY NAME: ______________________
Last First

GOAL ATTAINMENT FORM

SHORT TERM GOALS (Those goals which are expected to take one year or less to complete)

GOAL	STEPS TO ATTAIN	GOAL INITIATED BY		FOR[a]	LEVEL OF STAFF ASSISTANCE		DATE			Other Agency Involvement	LOCUS OF GOAL		NEW DEVELOPMENTS RELATED TO GOAL ATTAINMENT
		Family	Staff		Staff[b]	Family[c]	Expected to be completed	Dropped or changed	Completed		Family Needs	Program Emphasis	
Goal # 2	# PARTICIPATE in Home & Center Prog	X		3	2,34	2					X		MOTHERS Job makes attending program activities DIFFICULT FOR HER.
Description: [illegible] MOTHER TO COPE	# ATTEND FAMILY COUNSELING									✓			
WITH CHILD	#												
MANAGEMENT	#												
For[a] 3	#												
Date Set MAY 7/79	#												
Goal #___	#												
Description:	#												
	#												
	#												
	#												
For[a]________	#												
Date Set __/__/__	#												

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[a]
1: Sample child only
2: Other child(ren) only
3: Mother only
4: Father (or father figure only
5: Mother and sample child only
6: Mother and father (or father figure) only
7: Other family grouping (specify)

[b]
1: Staff giving information
2: Staff assisting in referral
3: Staff giving support
4: Staff insuring that service is provided

[c]
1: Parent continues with little or no follow-up
2: Parent continues only with regular staff follow-up
3: Parent needs follow-up and someone to accompany to get services

FAMILY NAME: ______________________
Last First

GOAL ATTAINMENT FORM

LONG TERM GOALS (Those goals which are expected to take more then one year to complete)

GOAL	GOAL INITIATED BY Staff	GOAL INITIATED BY Family	ASSOCIATED SHORT TERM GOALS	PROGRESS INDICATORS (IF APPLICABLE)
Description: OBTAIN GED. For[a] 3 Date Set 1/79 Expected Date of Completion 6/80		X	enroll in GED classes.	
Description: TO BECOME INDEPENDENT FROM SUPPORTIVE PROGRAMS For[a] Date Set Expected Date of Completion			OBTAIN a regular Well-paying job. ADEQUATELY COPE WITH FAMILY DEMANDS	
Description: For[a] Date Set Expected Date of Completion				

[a]
1: Sample Child only
2: Other child(ren) only
3: Mother only
4: Father (or father figure) only
5: Mother and Sample child only
6: Mother and father (or father figure) only
7: Other family grouping (specify)

Appendix D

TECHNICAL PROGRESS REPORT ON THE BAYLEY SCALES OF INFANT DEVELOPMENT PILOT STUDY

The comprehensive nature of CFRP and its innovative character pose many problems for evaluation, both conceptual and methodological in nature. Among the most difficult problems is the assessment of the impact of such a complex intervention program upon infants.

At six CFRP sites, a treatment-comparison group design is in use to compare children and families over time. Five outcome categories have been defined: (1) family circumstances, (2) maternal and child health, (3) parent-child interaction, (4) child development and achievement, and (5) family capacity for independence. Interviews with CFRP staff and parents and child assessments are being used to assess family outcomes. Although developmental tests for very young children have generally produced ambiguous results, even for intervention programs focused directly on children, the need for information about program impact upon infants suggested the use of a standard developmental scale during the early stages of the impact study.

In the spring of 1979, the evaluation sample consisted of families with children in the age range 5-19 months. Children in this age range have typically been assessed using standardized scales such as the Denver Developmental Screening Test (DDST) or the Bayley Scales of Infant Development (BSID). In the lower portion of this age range (5-10 months), such scales rely largely upon parent report or observation of normal behavior over a brief period of time. In the 10- to 18-month age range such scales focus on fine motor imitation tasks, understanding and following directions, and gross motor development. It is to be expected that development in these areas would be influenced positively by high-quality parent-child interaction. The PCDC program, with more extensive parent training and direct child intervention activities than CFRP, first achieved program control differences on the Bayley at about 18 months. Moreover, reviewers (Golden and Birns, 1969) and researchers (Wachs, Uzgiris and Hunt, 1967) have shown that toddlers from different social and economic backgrounds do not begin to diverge in performance on standard tests until 18 to 24 months of age.

In order to facilitate comparison of CFRP with other research studies of young children, particularly studies of PCDC, Abt Associates recommended the use of the Bayley Scales of Infant Development. The Bayley also offered the advantage of recent standardization (1969). It was recommended that the testing be conducted in the child's own home. This practice is a departure from that employed in most other studies, but there were several reasons for this recommendation. First, the families participating in this study typically have difficulty arranging for either transportation or child care, and testing in the home can relieve both problems. Second, the rate of cancelled or unkept appointments would be minimized. Third, children of the age tested frequently have a reaction to unfamiliar surroundings that might affect performance. Therefore, the home setting was selected as appropriate for this study.

During May and June 1979 a total of 43 children (19 CFRP, 24 control) aged 15-18 months were assessed using the Bayley Scales of Infant Development. The testing was conducted in children's homes in Salem, Oregon and Oklahoma City, Oklahoma. This data collection was considered a pilot test and feasibility study for a larger-scale testing effort to be conducted at each of the six summative CFRP sites during the fall of 1979.

Training

Training for two testers (one at each pilot site) was provided in Oklahoma City just prior to the data-collection period. None of these staff had had any experience in conducting infant assessments. Therefore, considerable training was necessary. Four days of training sessions were offered; in addition, each tester received three days of preliminary training and familiarization from an experienced infant tester prior to the Oklahoma City training. The training at Oklahoma City was under the direction of a staff member from the Brookline Early Education Project (BEEP). The training sessions included extensive review of each test item, including administration procedures and scoring instructions. Each trainee practice-tested two children and observed the other trainee during testing. Review and feedback sessions offered testers and other staff an opportunity to comment on the adequacy of the procedures. Several important things were learned and suggestions set forth:

1) It is difficult to find staff experienced in infant test administration who are available 30 hours per week on a short-term basis. Failure to find experienced staff led to expansion of the originally anticipated one or two days of training.
2) A crucial factor in becoming familiar with the Bayley is to have many opportunities for monitored practice. Trainees were able to practice four times prior to beginning with study families: twice before training and twice during training. This was barely adequate. Videotaping practice sessions might increase the intensity of review sessions and reduce the need for additional practice testing.
3) It is not possible for the Bayley tester to administer a parent interview before or after a Bayley assessment. The assessment takes thirty to forty-five minutes and is quite exhausting.
4) The training procedures were successful, and staff were adequately prepared for the task of conducting Bayley Infant Scale assessments.

Analysis--Individual Items

For the age range tested, about 45 items were administered from basal to ceiling levels of achievement on the Mental Development Scale (MDS). Table D-1A indicates the percentage of children passing each item between the 12.0- and 23.0-month norms (broken down by 15- to 16-month- and 17- to 18-month-old children). Eleven of the items used were normed within the age range of the children tested (numbers 117 to 127). For those items, the percentage passing ranges from 14 to 70. For the Mental Development Scale, items judged to be more difficult (those normed for older children) were passed less often. Older children passed most items more often than younger children. However, a few exceptions may be noted. Item 119 (tower of 3 cubes) was passed less often than might be expected, while items 120 (round block in the pink board) and 126 (following directions) were passed more often than expected for this group of children. Younger children did substantially better than older children on items 111 (tower of 2 cubes), 115 (closing round box), and 131 (finding objects). Given the small sample size, this is an acceptable number of discrepancies from the general trends noted. As Figure D-1 illustrates, there are only a few items in the ranges of 50-65 percent passing and 35-45 percent passing. Again, these shortages are not critical given the small sample size and the large number of items in the higher and lower ranges.

For the Physical Development Scale (PDS) only 11 items separate group basal from ceiling (items 49 to 59), and only 5 items are normed for the age group tested (Table D-1B). Each item in the PDS up to the maximum normed age was passed by 70 percent or more of the sample. The remaining items were passed by 12 or fewer percent of the sample. Overall, then, the PDS does not contain adequate discriminatory power

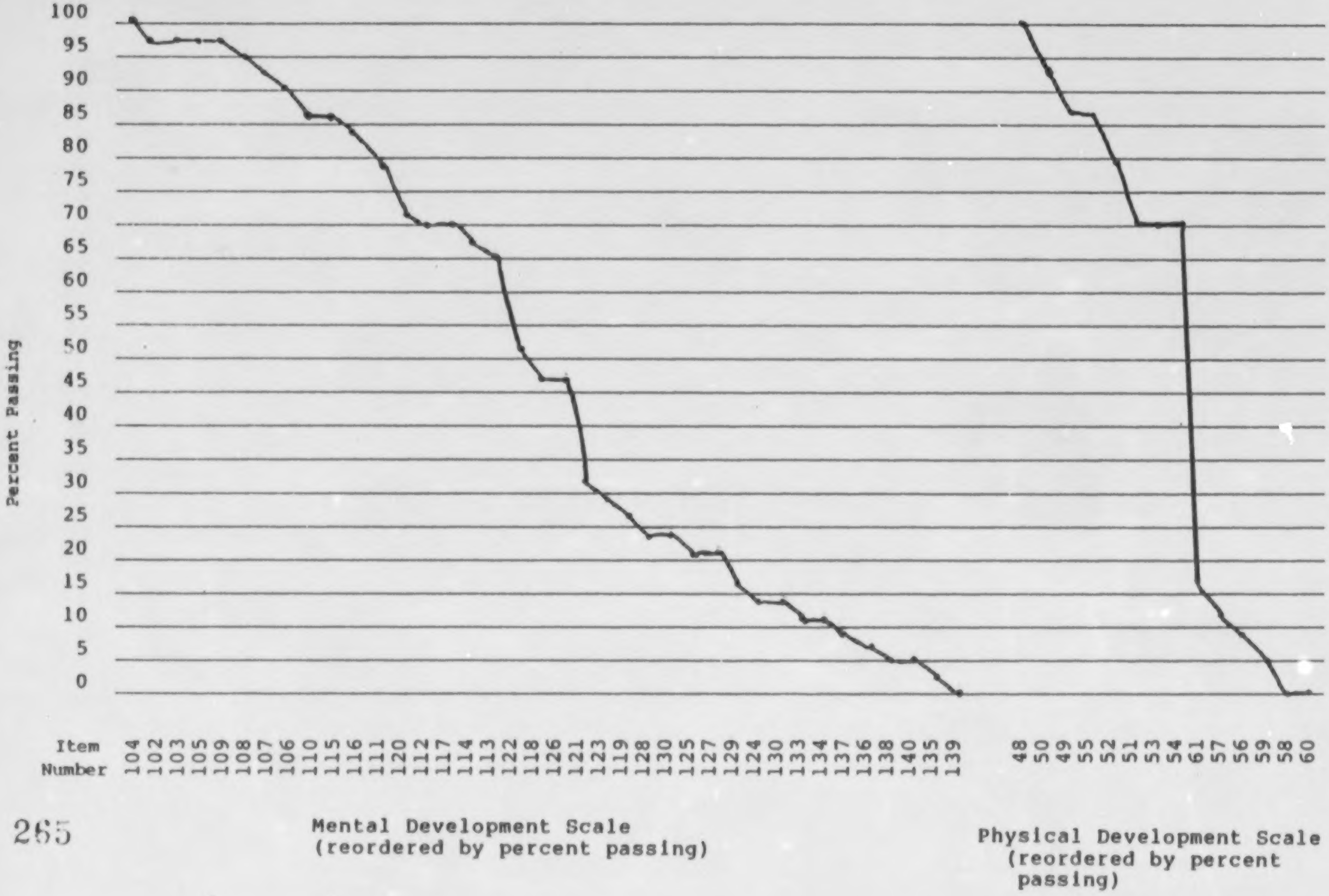
Table D-1

Percentage Passing Bayley Scale Items
B. Physical Development Scale

Item	Normed Age (Months)	Children 15-16 Mos Old (N=22)	Children 17-18 Mos Old (N=21)	All Children
47. Stands up: I	12.6	100	100	100
48. Throws ball	13.3	100	100	100
49. Walks sideways	14.1	77	95	86
50. Walks backward	14.6	91	95	93
51. Stands on right foot with help	15.9	73	71	72
52. Stands on left foot with help	16.1	77	81	79
53. Walks up stairs with help	16.1	59	81	70
54. Walks down stairs with help	16.4	54	86	70
55. Tries to stand on walking board	17.8	91	81	86
56. Walks with one foot on walking board	20.6	14	5	9
57. Stands up: II	21.9	5	19	12
58. Stands on left foot	22.7	0	0	0
59. Jumps off floor, both feet	23.4	5	5	5
60. Stands on right foot alone	23.5	0	0	0

Figure D-1

Percentage Passing Bayley Scale Items



for the age range tested. A review of other physical development assessments suggests that children of this age range are at a general plateau of gross motor skills where little testable variation between children has been identified.

Analysis--Scaled Scores

The Mental Development Index (MDI) was computed for each of the 43 children tested. The average MDI was 95.4 and was similar at both sites (Salem 96.0; Oklahoma City 94.7). Analysis of the MDI suggests that CFRP children performed slightly better than control children (Table D-2). In addition, three children in the control group performed at a level of 2 or more standard deviations from the mean. Two children were scored in the 130 range; one child was scored less than 60; no other children were within 10 points of these scores. When these scores are removed from the analysis the difference favoring the CFRP children is marginally significant, primarily due to a reduction in the control group standard deviation from 18.5 to 13.2.

Table D-2
Bayley Scale MDI Results:
Group Comparison

	Full Sample				Sample with Outliers Removed			
	n	mean	(s.d.)	t(41)	n	mean	(s.d.)	t
CFRP	19	97.3	(12.9)	0.71(n.s.)	19	97.3	(12.9)	1.31($p<.10$)
Control	24	93.9	(18.5)		21	91.9	(13.2)	

For both CFRP and control children, performance with respect to norms was less satisfactory in older children. This result parallels the data from a number of other studies of infant intervention programs, including the PCDC program. The correlation between child age and MDI was -.51 ($p<.01$). Since the tested control group children were slightly older than the CFRP children (17.1 months of age as opposed to 16.7

months old), the slight group differences noted above may be attributable to the group age difference, at least in part. An examination of the groups broken down by age suggests that group differences favoring CFRP may be slightly larger for the older children (Table D-3). When the control group outliers are removed, however, this trend is not evident. Clearly, the small number of children involved in this examination requires that any conclusions be highly tentative.

Table D-3

Bayley Scale MDI Results:
Comparison Between Younger and Older Samples

	15-16 months			17-18 months		
	n	mean	difference	n	mean	difference
CFRP	8	102.3		11	93.6	
Control (full sample)	12	99.3	-3.0	12	88.5	-5.1
Control (outliers removed)	9	97.0	-5.3	12	88.5	-5.1

Testing Conditions and Test Behavior Indicators

In addition to administration of Mental and Physical Development Scales, the testers completed an Infant Behavior Record for each child. This record provided an opportunity to assess both the test environment and the social behavior of the child (and parent, if present). The results are illustrated in Table D-4. As shown, most children engaged willingly in the test and were friendly towards the examiner, with some initial wariness. All tests were rated at least "fairly adequate." Comments concerning the test environment did suggest, however, that occasional problems may be encountered in the home testing situation. Problems noted in the social aspect of the test environment were the presence and interference of other children (9%) or pets (4%); interruptions from adults (4%); and noise due to television or stereo (9%). The physical environment was occasionally dark (9%), cold (2%), or infested with roaches (2%). A number of homes (15%) did not have adequate testing surfaces for the MDS or areas where the PDS items could be attempted without some limitations. Several homes had a number of the above problems. In all, 72 percent of the home test environments were free of any kind of problems. While the environmental problems are of some concern, they do not override the rationale developed above for conducting tests in the child's home. Many of the problems noted might be alleviated by asking parents in advance to set aside a time when they and their child might be alone and the house quiet. However, some problems will remain unavoidable.

Summary

It appears from the pilot test that home testing using the Bayley Scales of Infant Development is a viable procedure. While some homes do present difficult test environments, the children were quite comfortable within those environments and performance on the BSID was consistent both with item and scale norms and previous research with infants from low-income families. Overall, CFRP children performed slightly better than control children on the Mental Development Scale. For both groups, performance with respect to norms was lower for older children. Problems associated with the Physical Development Scale suggest that the usefulness of the scale for the age group assessed in the pilot test is limited. The PDS contains only five items normed for the 15- to 18-month age range, and each of those items was passed by over 70 percent of the children tested. In addition, the necessary equipment (a six-foot-long walking board and a three-stair step stool) is heavy and cumbersome to bring into a home. For these reasons, we have recommended that a limited version of the PDS be used in the fall 1979 child assessment. That version will exclude items using the extra equipment.

Table D-4
Infant Behavior Record Summary

Category	Review of Responses
1. Social orientation (responsiveness to examiner)	21% hesitant; 28% accepting; 49% friendly; 2% inviting
2. Cooperativeness with examiner	2% refused many items; 18% refused or resisted on one or two items; 24% accepted test willingly; 56% enjoyed and readily performed test items
3. Fearfulness	7% no apparent fear; 74% some restraint during early portion of test; 9% moderate restraint during first half of test; 9% moderate restraint during much of the test
4. Goal directedness (persistence)	26% easily distracted; 65% fairly persistent; 9% very persistent
5. Communication skills	7% silent throughout testing; 76% occasional vocalization; 9% frequent vocalization/few words; 7% frequent verbalization
6. Parent behavior/test assistance	46% no assistance; 46% occasional assistance or interference; 7% frequent assistance or interference
7. Parent behavior/emotional support*	23% frequent positive support; 62% occasional positive support; 9% no comments to child; 21% occasional negative comment; 2% frequent negative comments
8. Judgment of test	9% fairly adequate; 46% average; 46% very good

* More than one category checked for some children.

Appendix E

TECHNICAL PROGRESS REPORT ON THE TIES PARENT-CHILD INTERACTION PILOT STUDY

The comprehensive nature of CFRP poses many problems for evaluation, both conceptual and methodological in nature. Among the most difficult problems is the assessment of the impact of such a complex intervention program upon infants. Outcomes for infants as a result of participation in CFRP depend primarily on the program's work with parents rather than on intervention directly with children. The infant-toddler component in CFRP emphasizes development of parenting skills, frequent and positive parent-infant interaction, and the growth of the family as a child-rearing system. In discussions with ACYF about the desirability of collecting child measures for children under two, Abt Associates staff recommended (1) that measures of child interaction with the social and physical environment and, in particular, measures of mother-child interaction should be included for consideration; and (2) that measures of child development and behavior reflect child (and maternal) behaviors that CFRP attempts to influence.

In January 1979 Abt Associates proposed to pilot test in the CFRP evaluation an observation system that had been developed and used in studies of families with young children from a variety of racial and cultural backgrounds. The Toddler and Infant Experiences (TIES) system, developed by Dr. Jean Carew and her staff, focuses on the child's interaction with the physical and social environment, particularly with the mother or primary caregiver. The major features of the pilot study included:

- observations of families with children 11-14 months of age.

- observations of normal, naturally occurring activities in each family's home.
- observations recorded on videotape for later coding.
- observation periods on two separate days, plus an introductory taping session for each family and focal child.
- observations of 32 families (16 CFRP, 16 control) at two sites (Salem and Oklahoma City) based on the availability of sufficient numbers of families with infants of appropriate age. The sample was racially diverse: all Salem families were white and all Oklahoma City families were black.

The pilot test procedures were shaped by concerns about research quality, staffing/implementation processes, and costs. On balance, naturalistic home observations can provide a basis for an ecologically valid assessment using measures of program effectiveness that are related to program emphasis. Videotape recordings were recommended because they provide the opportunity to assess the reliability of coding procedures and to extend or correct the coding if necessary. Observations on two different days were included in order to assess the stability of the observed behaviors and to assure the comparability of the procedure for both CFRP and control groups (CFRP families might be initially more at ease with visitors in the home as a result of program experience). Finally, the observations were limited to two sites due to a desire to retain adequate control over the data collection process and because of financial constraints.

The purpose of the observations was to gather information about the normal interactions of the child with the physical and social environment, focused particularly upon mother-infant interaction. Many research projects have dealt with assessment of infant behavior and mother-child interaction. However, few well-accepted procedures or measures have emerged from this body of work. Of major relevance to CFRP is research pertaining to the role of the mother as teacher (in addition to such roles as nurturer, caregiver, and provider). This research has involved observational methods (often supplemented by interviews) using home, experimental, and waiting room contexts. Several studies have emphasized social class (Bee, 1969; Brophy, 1970; Hess and Shipman, 1965, 1967; Stodolsky, 1968; Tulkin and Kagan, 1973) or ethnic (Steward and Steward, 1973) differences, with the children typically being observed at one point in time. Others have emphasized individual differences within lower-income groups (Slaughter, 1969; Gordon, 1969; Herman, 1970; Radin, 1971). Some have included repeated observations over several months, thus employing longitudinal designs (Clarke-Stewart, 1973; Carew, 1975). Others have obtained such data in the conduct of experimental intervention programs targeted at mother-child dyads (Gorden, 1970; Schaefer, 1969; Levenstein, 1970; Robinson, 1975).

The results of these studies indicate that maternal teaching behavior is likely to be relatively infrequent and informal. The most important teaching activities (judged by child performance outcomes at a later period) are embedded in mutually reciprocal interactions wherein the mother initiates interaction at appropriate moments, is responsive to child signals, and actively participates in activities with children.

An effective pattern of communication between mother and infant is critical. Particular discrete maternal behaviors or techniques, such as praise or disparagement, are not as important as an overall style of behavioral organization which has been labeled individuating (Slaughter, 1969), contingently responsive (Ainsworth, 1973; Clarke-Stewart, 1973), participatory (Carew, 1975), and personal-subjective (Hess and Shipman, 1965, 1967), for example. This style emphasizes the proactive, orienting, structuring, stimulating, focusing elements of maternal behaviors in interaction with young children, in contrast to restrictive, controlling, or laissez-faire orientations, however warm in character and well-intentioned in aim.

Candidate observation variables included the following:

- interactiveness--the total amount and type of interaction between a mother and child during a given period of time.
- maternal initiative and responsiveness--the number of maternal initiatives to interaction with the child and the frequency of responding to child initiatives to interaction.
- child activities--the profile of solitary and interactive activities engaged in by the child during a period of time.
- child interaction--the profile of social activities and communication with other persons, including children and adults other than the mother.

Each of the above variables may be linked to the CFRP activities encouraging appropriate mother-infant interaction and consequent positive impact upon the infant's capacity to deal with the physical and social environment. Further, each variable can be observed in the home.

The TIES coding system, developed by Dr. Jean Carew is organized:

a) to trace the development of various social, language, spatial, expressive, reasoning, fine motor, and gross motor competencies as these are manifested in the child's observable behavior; and

b) to specify the forms of environmental stimulation (chiefly the behaviors of caregivers and others directed toward the child) that the child receives and that are likely to promote these competencies.

The TIES observation system is closely related to the observation system used in the National Day Care Home Study (the Carew-SRI observation) and based on prior research conducted by Dr. Carew. Therefore, experience in several earlier studies served as the basis for the project. Dr. Carew assisted AAI in the training of field staff, directly supervised the coding of pilot test data by her staff, and has been consulted throughout the analysis of the resulting data.

This report contains the results of the TIES pilot study, including a description of the training process, data collection methods, coding procedures, and data analysis. Additional available materials include (1) SUPPLEMENT TO FIELD PROCEDURES MANUAL: Procedures for the Observation Team (Spring 1979); (2) the TIES CODING MANUAL (October 1978) and modifications (November 1979); and (3) Descriptive Summary of the CFRP-TIES Pilot Test Data (January 1980). The first two documents contain materials provided to the observation and coding teams during training; the third contains supplementary tables from the TIES data base.

Pilot Study Procedures

The observation pilot test activities consisted of training for data collection in Oklahoma City, three visits to observation sample families, training of two TIES system coders in Palo Alto, coding of 49 videotapes, and analysis of the resulting data. This section provides an overview of the pilot study sample, the data collected, the structure and sequence of data collection activities, and the training for data collection and TIES coding.

Sample. Families with children between 11 and 14 months of age were selected for the observation pilot study at two sites--Salem, Oregon and Oklahoma City, Oklahoma.

The goal for the pilot test was to observe 10 CFRP and 10 non-CFRP families at each of these sites during the six-week period from May 4 through June 15, 1979; thus, the maximum observation sample would consist of 40 families. This goal was reviewed by on-site and Cambridge staff after four weeks to determine whether it was realistic or whether fewer families should be observed. Scheduling of observations required more time than anticipated, staff in Oklahoma City had encountered transportation problems, and 4 CFRP families (1 in Salem, 3 in Oklahoma City) had refused to participate. Finally, on-site staff were requested to complete observation visits to those families already scheduled at the end of four weeks.

Videotapes were received in Cambridge for 34 families (15 from Oklahoma City, 19 from Salem). One set from Oklahoma City was judged too dark to code acceptably. Following review and TIES coding, one set of Salem videotapes was removed from the data base because the focal child's mobility had been limited by a half-body cast. The final data base consisted of 32 families, distributed by group and site as shown below. All of the families from Oklahoma City were black, and all from Salem were white.

	CFRP	Control	
Oklahoma City	7	7	14
Salem	9	9	18
	16	16	

Data collected. The videotaping of the child's natural activity in the home was the primary focus of the observation data collection. However, several other types of information were collected at the same time. In all, the following types of data were collected.

Parent Interview 3; completed as for all other families in evaluation sample.	45-60 minutes

Videotapes; focused on the child, of naturally occurring activity in the home.	Three 30-minute segments
Parallel coding of mother behavior during first two 30-minute segments while videotape focus was on child; this coding provided additional information about mother's activities not seen on videotape and assisted observation team in selection of brief tape segments for replay to mother.	Two 30-minute segments*
Open-ended interview with mother as she viewed several selected segments (3 minutes each) of videotape; this interview was audio-taped.	One 30-minute interview including 10 minutes of videotape viewing
Visit records completed by observation team following each visit to home, noting conditions which might have affected the observation.	Three 5-minute forms for each observation team member

Structure of data collection. The above data were collected during three visits to each family. During the first two visits, two CFRP evaluation staff (a videotape cameraperson and an interviewer/facilitator) were present. The third visit was completed by the cameraperson alone. The visits were structured as follows:

Visit #1.	Completed parent interview. Introduced parent to videotape equipment and demonstrated procedures for videotaping (including 5-minute practice tape and immediate playback of the tape so mother could watch). Obtained mother's agreement to participate in observations.	1 1/2-2 hours

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*Information from the parallel coding effort was used primarily to select videotape segments for the open-ended interview with the mother. These data were not analyzed for program or site differences due to the highly exploratory nature of this portion of the pilot study (see later sections of this report concerning data collection training).

Visit #2.	After a brief period of setting up equipment and getting reacquainted, made two 30-minute videotapes of the child as he/she naturally appears at home. During videotaping segments, facilitator coded the activities of mother.	Less than 2 hours
Visit #3.	After a brief period of setting up equipment, made another 30-minute natural observation videotape of child, followed by a 30-minute playback interview with mother.	1 1/2-2 hours

Data collection training. The two-person site teams were trained in videotape data collection procedures during a three-day period in Oklahoma City by staff from both AAI and the TIES project. The site teams were previously unfamiliar with videotape equipment or general observation procedures. Therefore, training emphasized the skills necessary to collect the actual videotape records. The parallel coding of the mother's activities was trained on the final two days; there was no opportunity to check reliability.

Overall, the training was considered successful by all staff. The cassette videotape equipment was easier to handle and more trouble-free than most had expected. The procedures were simple enough and the staff quick enough so that few obvious problems were present at the conclusion of the training (see below for a review of videotape data quality). However, a number of lessons were learned that would serve to make future training more effective. All parties agreed that more time was needed (4 to 4 1/2 days) to complete adequate training for all aspects of the data collection. Additional training materials for the parallel coding and playback interview would make it possible to train those procedures more efficiently and adequately. Further, intercoder reliability checking of the parallel coding system is necessary to establish the usefulness of analysis of that information.

TIES training and coding.* Coding-interval beeps were added to the 99 videotapes at AAI before shipment to the TIES staff for coding. In addition, the tapes were given blind identifications so that the group assignment (CFRP/non-CFRP) of the family would be unknown to TIES staff. The coding schedule required three individuals (two trainees and one experienced TIES staff member) to code 20 of the 99 videotapes for later analysis of coder reliability and code generalizability. The remaining 79 tapes were coded by the two trainees.

The training sessions were conducted during June 1979. The period following the three-week training session was devoted to independent coding of the CFRP tapes by the trainees. Each trainee was expected to code 18 hours a week and to attend a six-hour staff meeting every Friday. Day-to-day coding problems were referred to the TIES coding supervisor, who decided whether the problem should be discussed in open forum. In the staff meetings, discussion was kept to a general (i.e., not tape-specific) level in order not to compromise blind coding of reliability tapes. Specific problems encountered by trainees were dealt with in individual conferences with Dr. Carew on Friday afternoons.

Two major concerns emerged during the first weeks of coding: (1) the condition of the rented VTR equipment, and (2) the technical quality of the videotapes. Equipment problems were solved within three weeks by replacing the videotape deck and two successive monitors. It was particularly unfortunate that one monitor produced the same kind of distortion inherent in the early tapes themselves (e.g., a very dark picture); thus, equipment defect was not suspected as a source of additional coding problems for almost two weeks. Technical difficulties in the tapes themselves included: (a) excessively loud 3-second beep signals; (b) excessively long beep signals (compared with the training tapes); and (c) poor visual and audio quality of the early tapes. Nothing could be done about the volume of the overdubbing, so coders accommodated themselves as best they could by manually adjusting volume control on the monitor whenever a beep was heard. During Friday sessions, coders were quickly able to evolve rules governing the inclusion or exclusion of behaviors "on the beeps" for coding.

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*This section is based on the CFRP Evaluation Report on TIES Training and Coding, Carew, J. and David, J., October 31, 1979.

The technical quality of the tapes was a recurring problem throughout the coding process. However, examination of coders' ratings of the technical quality of the tapes compared with the dates on which the tapes were made gives evidence of significant improvement as the cameraperson gained experience. Three significant factors apparently contributed to the technical difficulties: (1) insufficient lighting for the cameras--a problem already solved by the TIES teams; (2) the light-absorbing quality of black skin, which may necessitate using a special VTR lens; and (3) interference of external sounds--TV, phonographs, too many voices. This audio interference might be minimized in future visits by using a special individualized microphone.

TIES staff rated quality of the tapes on a three-point scale for several dimensions throughout the coding process. As indicated in Table E-1, the most severe problems were found in the audio ratings (36% less than adequate). Overall, 22 percent of the tapes were rated less than adequate; of these, 12 percent were CFRP and 10 percent were control family tapes. Problems appeared more often in the Oklahoma City tapes (14%) than in Salem (8%). Essentially, the TIES coders were comparing the pilot tapes with their prior experience--that is, with the training tapes. The training tapes had been selected from those made by the TIES project over a lengthy period of time by experienced camerapersons, and they were selected at least partially for their high quality. In general, the CFRP pilot tapes were inferior both in audio quality (more outdoor taping, more family members present, more background noise) and video quality (home interiors generally darker).

Table E-1
TIES Coder Rating of Videotape Quality
(percent)

	Barely Usable	Problem-atic	Adequate	Good	Very Good
Audio	16	20	44	12	7
Video	12	15	39	12	17
Overall	10	12	47	18	9

In addition to concerns with videotape quality, the TIES coders felt that the children in the pilot study sample were more diverse in behavior and more mobile than those in the training tapes. The surprisingly broad range of child behavior in the sample, as well as the technical difficulties, made several coding changes advisable. The result is a folio of revisions and clarifications incorporated in the TIES manual.

The TIES staff felt that both videotape technical problems and coding problems would be greatly diminished in future efforts and offered several recommendations for potential future use of the TIES system in conjunction with the CFRP project. These recommendations included:

(1) identification of family members present on the videotape just after taping begins; (2) upgrading of equipment as new advances become commercially available; (3) increased training and practice time for camerapersons; (4) extension of TIES coding training to 18 days, adding several days for reliability checking; and (5) increased communication between coders in the early phases of coding and delay of blind-coding reliability tapes.

Data Analysis

Analysis of the CFRP-TIES data base consisted of three steps. First, the frequency and consistency of the TIES codes were examined. Second, the relationships of codes and coding dimensions were analyzed through factor analysis. Finally, differences between CFRP and control-group families were examined by means of analysis of variance.

TIES coding categories. TIES codes specify the activity of the child and the characteristics of the child's social interactions. The child's activities, interactions, and behavior are observed for 3 seconds and coded over the next 17 seconds (a complete observation sequence every 20 seconds). From the videotapes, the first 75 coded observation frames were included in the CFRP data base (this was done to equalize the number of data points for each child).

The 12 major coding dimensions of TIES are as shown below. In all, 74 codes are available for use in the 12 coding categories.

- Activity. The activity codes include behavior relevant to social-emotional development (distress, affection, control, negative/aggressive); behavior relevant to intellectual development (learning language, fine motor spatial, fine motor exploratory); and general behavior (gross motor, physical needs, monitoring, and transitional activity).

- *Caregiver location*. The caregiver location is coded as near (3-4 feet from the child) or far/absent.
- *Identity of interactor*. If the child is engaged in social interaction, the interactor (mother, father, other adult, other child, group) is identified.
- *Interaction type*. Interactions are coded as convergent (shared focus for the interactors), divergent (different focus/purpose), or borderline (minimal involvement by one of the interactors).
- *Interaction source*. The active individuals during interactions are identified (child, interactor, or both).
- *Interaction facilitation*. Modes through which the interactor facilitates the child's activity are identified (teach, play, help, direct, conversation, look/listen).
- *Interaction control*. The mode and strength of interactor control of child's behavior is recorded (explain, routine, strict).
- *Interactor language* (present, present but unintelligible, not present).
- *Interactor emotion* (happy, sad, angry, neutral).
- *Child emotion* (happy, sad, angry, neutral).
- *Child mobility* (unrestricted).

Frequency and consistency of TIES codes. As expected, considering the age of the child sample, many of the available codes were rarely used. The remainder of this report considers only those codes that occur in more than 2 percent of the observation frames. Table E-2 illustrates frequencies for these codes and the consistency of these codes from the first to the second half hour (first-day observations) and from the first day to the second day of observations.

Table E-2

Frequency and Consistency of Selected TIES Codes

	Percent of all codes	Percent of interactions only	Consistency (correlation)	
			First half-last half	Day-to-day
Activities				
Negative	2.95	5.76	.25	.19
Control	5.29	16.53	.72*	.16
Distress	2.11	3.45	.19	.10
Affection	4.63	13.87	.33*	.26
Fine motor exploratory	22.68	11.82	.26	.12
Physical needs	15.08	13.44	.10	.22
Monitoring	15.28	5.41	.48*	.43*
Transition	22.32	11.69	.27	.21
Caregiver Location				
Near	38.44		.39*	.28
Identity of Interactor				
Caregiver/mother	22.17	68.78	.56*	.21
Father	2.50	7.76	.69*	.58*
Other adult	3.63	11.26	.26	.16
Other child	2.99	9.28	.54*	.32*
Interaction Type				
Convergent	27.71	85.98	.51*	.52*
Divergent/borderline	4.39	13.62	.42*	.32*
Interaction Source				
Child	8.57	26.59	.34*	.27
Child/interactor	12.39	38.44	.46*	.44*
Interactor	11.27	34.97	.40*	.24
Interaction Facilitation				
Play	5.02	15.58	.46*	.39*
Help	9.91	30.74	.36*	.37*
Conversation	2.32	7.20	.42*	.40*
Look/listen	4.56	14.15	.35*	.30
Control				
Routine	5.00	94.52**	.58*	.18
Interactor Language				
Present	11.63	36.08	.50*	.31
Interactor Emotion				
Happy	5.69	17.65	.36*	.32*
Neutral	25.76	79.93	.52*	.58*
Child Emotion				
Happy	5.69		.43*	.43*
Sad	2.30		.03	.00
Angry	3.52		.42*	.42*
Neutral	86.23		.13	.10
Child Mobility				
Free	82.81		.47*	.36*
Held	9.57		.28	.20
Confined	7.05		.69*	.63*

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n=32

*$p \leq .05$

**percent of control interactions only.

Eight of the 24 activity codes account for over 90 percent of the infant activities. Fine motor exploratory behavior is the most frequently used code (22.7%), followed by transitional activity (22.3%), observing/ monitoring (15.3%), and physical needs (15.1%). As a group, the activity codes are relatively stable within the same day (average correlation=.33), but less so from day-to-day (average correlation=.21).

The infants were engaged in social interaction only about 32 percent of the time. About 69 percent of those interactions were with their mothers, and another 8 percent with their fathers. The frequency of interactions was substantially more consistent than the frequency of various activities, both within day (average correlation= .51) and between days (average correlation=.32). Certain activities were more likely to involve social interaction. Control affection, and physical needs activities almost always involved interaction (and make up about 40 percent of the children's interaction activities), while fine motor exploratory and transition activities were rarely social in nature.

The primary characteristics of the infant's social interactions are that they were convergent (86% of all interactions), and that child and interactor were almost equally active (see interaction source frequencies); the most frequent methods used by interactors to facilitate an activity with the child were helping (30.7%) and playing (15.6%). Direct teaching was rare, and language was used by interactors only 36 percent of the time. Positive (happy) emotion was present in only about 18 percent of the interactions; that proportion far exceeds, however, the 2.2 percent of interactions in which anger was in evidence. Overall, the dimensions of infant social interactions are quite stable both within day (average correlation =.44) and across two different days (average correlation =.33).

A study of the reliability of TIES codes and generalizability of the oserved child behaviors (a G-study)* was conducted using videotapes of 10 families, 4 from Oklahoma (2 CFRP and 2 control) and 6 from Salem (3 from each group). Within the constraints of balancing the design, videotapes for the G-study were selected at random from the pool of tapes available for the 32 families in the pilot study. Two 30-minute tapes of each family (taken on different days) were coded by each of three coders; two coders were those used for coding all the tapes in the pilot study, while the third was a coding trainer. None of the coders knew the group membership of any families (CFRP or control); excepting the third, none were aware of which tapes were to be used for the G-study (although all were aware that a reliability study was to be done). G-study tapes were interspersed, throughout the coding period, with other pilot study tapes.

Variance components estimates were computed by random effects ANOVAs for coders, families, days, coder-by-family interactions, and videotape segments within day. The major question was whether coder effects contribute more or less variation to measures than family effects. The results were consistent for all of the codes analyzed. Coders contributed extremely small amounts to the total variation measured (generally less than 2 percent for each code), demonstrating a high degree of between-coder agreement. As would be expected, most of the variation was associated with tape segments (or moment-to-moment conditions influencing the child's behavior). A large proportion of the variation (up to 35 percent for some codes) was associated with families, however, suggesting measurable consistency in between-family differences.

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*The purpose of the G-study (see Cronbach et al., 1972) is to estimate components of variance in TIES measures attributable to facets of the measurement design (coders, families, days, and segments within day).

Interrelationships of codes. The next step in the analysis was to examine how the codes from the various categories were related. A set of 24 variables were entered into a principal component factor analysis with varimax rotation. The 24 measures included: the 8 most frequently occurring activity codes; the frequency that the mother was near the child; the total amount of interaction; the proportion of total interactions involving the mother; the proportion of divergent or borderline interactions; the proportion of interactions where the child was active (either alone or in combination with the interactor); the interaction facilitation codes; the proportion of interactions where the interactor used language, was happy, and was angry; the proportion of time where the child was happy and angry; and the proportion of time the infant was being held. The measures were selected on the basis of relative frequency, relative independence, and analytic meaning. The factor analysis produced 10 orthogonal factors accounting for 86 percent of the variation in the 24-measure set. When rotated, the 10 factors had a clean structure, combining variables in a logically interpretable pattern. Table E-3 shows the highest loadings on the varimax rotated factor matrix.

The factor analysis included descriptors for the entire set of child behavior, including both solitary activities and social interaction. Five of the 10 factors are identified largely by activity code descriptions. These include the activities where interaction is most likely (control, affection, physical needs, and fine motor exploration--see Table E-2) as well as distress. The remaining 5 factors are related to aspects of social interaction: the frequency of mother-child interaction, the frequency of child-active interactions and angry interactions, and the frequency of two facilitation modes--conversation and helping.

Table E-3

TIES Varimax Rotated Factor Structure*

	I	II	III	IV	V	VI	VII	VIII	IX	X
Activities										
Negative				.78						.44
Control			.55			-.58				
Distress										.68
Affection	.89									
Fine motor exploratory									.73	
Physical needs								.96		
Monitoring			-.56							
Transition								-.49		-.44
Location of Mother										
Near			.76				.40			
Interaction Characteristics										
Total interaction	.54		.75							
Mother-child interaction							.81			
Divergent/borderline interaction		.78								
Child active in interaction		.80								
Child and interactor active in interaction	.69									
Interactor plays	.93									
Interactor helps						.89				
Conversation					.87					
Interactor looks/listens		.73								
Interactor uses language					.82					
Interactor happy	.83									
Interactor angry				.75						
Child happy	.79									
Child angry				.69						
Child held			.70							

*loadings greater than .40

Factor I: Affectionate Mutual Interactions. The first factor reflects interactions involving affection (.89) and play (.93), with both child and interactor active in the interaction (.69) and exhibiting positive emotion (.83, .79). This combination is related to a relatively high total amount of social interaction for the child (.54).

Factor II: Child-Active Interaction. High child activity (.80) during interactions and high frequencies of interactor looking/listening (.73) combined with relatively frequent divergent or borderline interactions (.78) to characterize the second factor.

Factor III: Physically Proximate Interactions. The third factor is loaded heavily on dimensions of caregiver proximity to the child--caregiver near child (.76) and child held by interactor (.70). Physically proximate interactions are associated with a high level of total interaction (.75), a low frequency of monitoring activity by the child (-.56), and a relatively high level of control activity (.55).

Factor IV: Angry Interactions. Factor IV reflects high levels of anger on the part of both child (.75) and interactor (.69) and a high frequency of negative activity (.78).

Factor V: Language Interactions. The fifth factor is a combination of high frequency of conversation (.87) and interactor use of language (.82).

Factor VI: Helping Interactions. Factor VI consists of high frequency of help facilitation by the interactor (.89) combined with a low level of control activity (-.58).

Factor VII: Mother-Child Interactions. A high proportion of interactions involving the mother (.81) and mother remaining near the child (.40) make up this factor.

Factor VIII: Physical Needs Activities. This factor combines physical needs (.96) with few transitional activities (-.49).

Factor IX: Fine Motor Exploratory Activities. The ninth factor loads heavily only on fine motor exploratory activity (.73).

Factor X: Distress. The final factor is a combination of high distress (.68) and negative activity (.44) and little transitional activity (-.44).

The factors resulting from the varimax rotation were sufficiently simple and coherent to be useful in comparisons between the pilot study sites and between the CFRP and control groups. Factor scores were computed and analyzed by a 2x2 ANOVA, as were the primary component variables for each factor. Significant differences ($p<.05$) were found for both program and site factors. The results of these analyses are shown in Table E-4.

Table E-4

Site and Program Differences (Factor Scores)

		Site			Program		
		Salem	Oklahoma City	F	CFRP	Control	F
I	AFFECTIONATE MUTUAL INTERACTIONS	0.15	-0.15	0.35	0.35	-0.35	2.53
II	CHILD-ACTIVE INTERACTIONS	-0.28	0.28	3.52	-0.13	0.13	0.56
III	PHYSICAL PROXIMATE INTERACTIONS	-0.37	0.37	6.14*	0.18	-0.18	0.29
IV	ANGRY INTERACTIONS	0.07	-0.07	0.10	0.28	-0.28	2.33
V	LANGUAGE INTERACTIONS	0.36	-0.36	5.25*	-0.12	0.12	0.46
VI	HELPING INTERACTIONS	-0.02	0.02	0.02	-0.08	0.08	0.14
VII	MOTHER-CHILD INTERACTIONS	-0.32	0.32	2.99	0.41	-0.41	5.31*
VIII	PHYSICAL NEEDS ACTIVITIES	0.01	-0.01	0.01	-0.13	0.13	0.37
IX	FINE MOTOR EXPLORATORY ACTIVITIES	-0.06	0.06	0.10	0.50	-0.50	8.73*
X	DISTRESS	-0.04	0.04	0.03	0.32	-0.32	2.40

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*p<.05

Program differences. Differences between CFRP and control families were observed on two important dimensions. Interactions between mothers and their infants occurred more frequently in CFRP families, overall and as a proportion of all social interactions (Table E-5). Also, CFRP children appeared to engage in fine motor exploration more often. The results were not uniform across sites. Mother-child interaction levels were higher in the Oklahoma City CFRP families than in any other group. Similarly, fine motor exploration was more frequent among the Salem CFRP children than in other groups. For both measures, however, the trend was consistent over both sites.

Because of the general CFR program emphasis on increasing mothers' sensitivity to their children and providing stimulation to infants, it can be argued that these are two of the most important dimensions in the observation coding. Higher frequency of interaction between mothers and children may have later impact on social, emotional, and cognitive development of the child. Similarly, a high frequency of fine motor exploratory activity may suggest early skill at fine motor manipulation, which may in turn represent a precursor to later cognitive development.

Site differences. Site differences were observed for factors relating to physically proximate interactions and language interactions (Table E-5). The first of these occurred more frequently in Oklahoma City, the second in Salem. These differences suggest different interaction styles (interpretable as a preference for proximate or distal forms of social interaction) that might reflect either ethnic (black Oklahoma City familes/white Salem families) or regional (Southwest/Northwest) variation. Differences in child-rearing styles associated with each of these factors has been noted in prior national research.

Table E-5

Expansion of Program and Site Differences

	Percent Occurrence				Significance of Comparisons					
	CFRP		Control		Site		Program		Interaction	
	Oklahoma City	Salem	Oklahoma City	Salem	F	P	F	P	F	P
Program Differences										
VII MOTHER-CHILD INTERACTIONS										
• Mother Interacts with Child (proportion of all activity)	32.7	23.2	15.2	18.4	0.82		9.13	.005	3.39	.08
• Mother Interacts with Child (proportion of social interaction	77.1	80.5	53.3	67.6	2.09		5.30	.02	1.00	
IX FINE MOTOR EXPLORATORY ACTIVITIES										
• Fine Motor Exploratory Activity	22.0	29.1	20.1	18.8	1.80		9.49	.005	3.72	.06
Site Differences										
III PHYSICALLY PROXIMATE INTERACTIONS										
• Control Activity	6.4	4.7	7.1	3.5	4.97	.03	0.11		0.65	
• Caregiver Near Child	53.7	38.5	30.5	32.7	1.75		7.67	.01	3.15	.09
• Child Held	17.4	5.3	9.0	8.2	4.35	.05	1.26		3.21	.09
V LANGUAGE INTERACTIONS										
• Conversation	3.8	7.9	4.0	11.6	5.65	.02	1.80		0.50	
• Interactor Uses Language	24.9	44.5	25.4	46.2	10.08	.004	0.03		0.01	

Discussion

The CFRP-TIES pilot study outcome results are encouraging. Videotape data collection, coding, and analysis of naturally occurring activity in the home have been shown to be feasible and to yield outcomes that have high face validity and reflect possible impact in areas that are of high relevance to the CFRP--e.g., increased levels of mother-child interaction and fine motor exploratory activity by infants 11-14 months of age. Nevertheless, several questions and issues remain.

First, do the results reflect true program impact or sensitization of CFRP families to the social desirability of certain behavior under observation conditions? There is no reliable way to determine the degree to which parents might be "acting" for the camera. However, ratings of the videotapes by the TIES staff did not reveal any suspicious patterns of behavior. Overall, most of the tapes were rated as consisting of a natural pattern of activities by adults. Tapes that were rated as suspect were distributed equally among CFRP and control families in both sites.

Second, how are results related to program variation between sites and to variation in family level of program exposure within sites? The small size of the pilot test sample made process/outcome analysis inadvisable. At this point in the evaluation, too little is known about the critical features of the program and the reliability of measures of such features to allow for an analysis of relationships between program exposure and family activities. The differences in results by site, noted in the previous section, might be the result of program variation or they might be attributable to the ethnic differences in the sample observed.

Third, should the observation study be continued as the children grow older? Given the promising results presented here and the potential for detailed examination of child-rearing environments and parent-child interaction afforded by the videotape methods, it would appear that observations should continue in the CFRP evaluation. Target children will be approximately two years old in spring 1980. Only slight modifications of the coding system and data collection effort are necessary to capture detailed information about the development of child language and the means used by parents to encourage child language. In addition, the two-year-old child es experiencing important changes in the areas of social and emotional development. Continued observation of more developmentally appropriate parent-child interaction in the CFRP families than in the control families through a second round of observations could form the basis for sound policy recommendations.

Appendix F

DATA REDUCTION

The approach to data reduction taken in the CFRP evaluation is empirical. Factor analytic strategies are avoided, as they presume some prior knowledge of a model to be estimated. Orthogonal rotations of principal components of correlation matrices provide a basis for the construction of variables. Determination of the number of principal components to be rotated is flexible and relies heavily on analysts' judgment. Typically, a number of rotations are examined and the choice of measures to be constructed weighs trade-offs between parsimony, interpretability, and the extent to which "important" items are included in the constructs implied by particular rotations ("importance" being argued on face-valid grounds).

This appendix describes the data reduction analyses completed for this report. Note that not all indices or composite variables used in this report derive from a data reduction task: some measures are simply counts (e.g., the number of "facilities"--including health care professionals--reportedly used by sample families); others are straightforward computations (e.g., total annual income divided by household size, or per capita income). The first section provides an overview of principal components analysis. Each later section describes a set of data reduction analyses; tables are accumulated at the end of each section.

Principal Components Analysis

Principal components analysis of a matrix of measures of association defines a series of new variables such that:

- each new variable is a weighted linear combination of the original items;
- the new variables are mutually uncorrelated; and
- there are the same number of new variables as items in the matrix being analyzed.

The principal components of a set of data, then, are nothing more nor less than algebraic transformations of that data set; there is no *reduction* of data *inherent* in the principal components.

Typically, correlation (rather than covariance) matrices are used for principal components analysis. Covariance matrices are scale-dependent; that is, a change in the response scaling to one or more items in the data set will alter the values of the covariances affected. The principal components of a covariance matrix are scale-dependent, too: covariance matrices that are different will have different principal components. Since (product-moment) correlations are invariant to linear changes in scaling, and since the scaling of item responses usually is arbitrary (at least in many social science applications), correlation matrices are often used in principal components analyses. [If a non-parametric measure of association is thought to be more appropriate than a product-moment correlation, a matrix of nonparametric "correlations" can be analyzed. In some of the reports that follow, Kendall's tau (corrected for tied rankings) replaces Pearson's r.]

Principal components analysis can be used to reduce the dimensionality of a data set by supplying information about constructing new variables and about the trade-offs involved in choosing between alternative reductions. The first set of important results is found in the listing of eigenvalues: each eigenvalue corresponds to a particular eigenvector, which in turn defines one principal component transformation; further, each eigenvalue estimates the variance of its corresponding principal component. The eigenvectors are ranked, typically from largest to smallest. The ratio of each eigenvalue to their sum (and if a correlation matrix is being analyzed, the sum of the eigenvalues equals the number of items in the data set), then, is the proportion of variance in the entire set of principal components due to the principal component corresponding to that eigenvalue.

The listing of eigenvalues provides an immediate (if abstract) table of trade-offs to be considered in choosing a data reduction of any given size; often, a "cumulative percent variance" column will accompany the listing of eigenvalues, making the trade-offs clearer. The trade-off, usually, is between parsimony and the "completeness" of information retained. Consider the two (invented) cases portrayed in Table F-1. In Case A, the first two principal components will account for 72 percent of the variance in all six principal components. Furthermore, there is a clear "break" in the eigenvalues between the second and third; the incremental (informational) contribution of each principal component after the second is fairly small relative to that of the first two. In Case B, however, a reduction of the data set from its original six items to some fewer number is not at all clear: the first two principal components will contain more than half the variation in all six principal components, the first three will account for 73 percent, the first four for 86 percent. But there is no immediate obvious choice between reduction to two, three, or four variables.

Table F-1

Two Hypothetical Sets of Eigenvalues

Case A		Case B	
eigenvalue	cumulative % variance	eigenvalue	cumulative % variance
2.25	37.5%	1.75	29.2%
2.00	71.8%	1.50	54.2%
0.75	83.3%	1.15	73.3%
0.65	94.2%	0.75	85.8%
0.30	99.2%	0.45	93.3%
0.05	100.0%	0.40	100.0%

In any case, the listing of eigenvalues is a starting point for data reduction. Having settled on a set of possibilities (e.g., two, three, or four variables in Case B above), interpretability and the extent of inclusion of the original items in the variables implied by each set are important considerations. The so-called "factor loading matrix" (hereafter, a loading matrix) contains useful information for these purposes. Its contents can be thought of as estimated correlations between each item in the data set and each principal component (for those components given). Unfortunately, the initial loading matrix often is filled with moderate values, with many (if not most) items showing moderate loadings on multiple components.

Rotations of the principal components solutions (or some subset) can be very useful here. Orthogonal rotations of some set of variables (whether or not they are principal components of a data set) lose no information, since the variables can be re-expressed completely in the newly defined space. [For a simple example, take any bivariate scatterplot and note that any rotation of the axes permits a reexpression of any data point, with no loss of information.] Furthermore, orthogonal rotations of principal components retain the absence of correlations between them, by definition. Orthogonal rotations that maximize "large" loadings and minimize "small" ones are very helpful: "varimax," "quartimax," and "equimax" rotations all strive for some kind of clarity in the (now rotated) loading matrix.

In a rotated loading matrix ("varimax" rotations are used throughout), components can be interpreted easily if particular items tend to be highly correlated with only one component and if the set of items correlated with each component seems to be a sensible collection of items. Here is where judgment plays a major role in data reduction: criteria for "highly" correlated and "sensibly" grouped are arbitrary. The choice between constructs (or variables) implied in rotations of different subsets of the principal components, then, is made by weighing (subjectively) the trade-offs in parsimony, interpretability, and the amount of information retained. Only rarely will the ultimate choice be clear-cut and obvious.

Having settled upon a set of (rotated) components that are to be the basis upon which a data set is to be reduced, the new variables must be constructed. One alternative is to use "component scores," or the estimates of the linear transformation that was algebraically determined. The problem with such scores is that the coefficients for weighting each variable, when viewed from a sampling and estimation perspective, are highly unstable. A more reasonable approach, one that is employed often, is to use weights of 1, -1, and 0 only, based upon the values in the loading matrix. [An item that is said to load "highly" on a given component is weighted 1 or -1, depending on the sign of the loading; others are weighted 0--that is, they are not used in constructing the new variable.] The latter approach is used in constructing variables for this report.

Socioeconomic Status (SES)

The SES data reduction was straightforward. Items taken from the first Parent Interview (fall 1978) were transformed via principal components analysis; a small number of principal components were retained for analytic use; these were supplemented by a few items considered to be important on face-valid grounds.

Twenty-three items were included in the principal components analysis; they are listed in Table F-2. Means and estimated standard deviations appear in Table F-3. Inter-item (Pearson) correlations appear in Table F-4.

From Table F-3, it appears that income source items from miscellaneous categories (Q111.6 and POTHER) could be problematic in an analysis of correlations: Q111.6 has missing data for nearly half the sample, and SUPPORT is rarely answered "yes" (8.8% of the sample) despite its collapsing of four income sources queried separately in the interview. Four sets of principal components were estimated: one on the full batch of items; one excluding POTHER only; one excluding Q111.6 only; and one excluding both Q111.6 and POTHER. The largest 12 eigenvalues from each reduction appear in Table F-5. It is apparent that the inclusion or exclusion of either or both items has little effect on the eigenvalue structure of the correlation matrix. Furthermore, rotations of different subsets of principal components yield similar interpretations. Table F-6 through F-9 contain the results of selected rotations.

Clearly, there are four major constructs derived from this exercise. The first is an "income sources" measure (INCSOURC); it consists of positive values for deriving any income from wages, income primarily from wages, and the presence of someone else in the household working to supplement income; negative values attend to deriving any or most of the household income from welfare sources. The second measure is per capita income (INCOME). The two remaining constructs are status measures. One is educational (EDUCA, or HSGRAD-NOGRAD); the other is marital (MARITAL, or MARRIED-NEVMAR).

Employment and housing items are not included in any of the SES constructs derived. Since housing and employment issues are important to families in CFR programs (see Chapter 3), three additional items are retained for analytic use. These are the two housing items (HOUSING and SUBSID) and whether the mother is employed (Q30, renamed EMPLOYED).

The distributions of three constructs suggested transformations. Only 16% of the sample of respondents are widowed, divorced, or separated; these are collapsed with the married category, making MARITAL a dichotomous variable (currently or once married versus never married). Less than 16% of the sample have any post-secondary education; these are collapsed with the high school graduate category, making EDUCA binary, too (at least high school graduate versus not). Finally, the distribution of INCSOURC is bimodal, but it is not clear that a dichotomous recoding is appropriate. A four-category collapsing was done (see Table F-10).

A principal components analysis of the seven SES constructs demonstrates that further reduction is possible, for analytic purposes only. Either one or three measures could be used. [Interconstruct correlations, eigenvalues, and the loadings on the first principal component appear in Table F-11; the rotated loading matrix for three components appears in Table F-12.] The one-measure representation is more nearly economic; three components retain some distinction between marital status, income, and economic status.

Table F-2

Items in the SES Data Reduction[a]

Income and Employment

Any income from wages (Q111.1)
Any income from welfare (Q111.3)
Any income from pensions, alimony, unemployment, and workmen's compensation (SUPPORT)
Any income from sources other than wages, welfare, pensions, alimony, unemployment, and workmen's compensation (Q111.6)
Primary income source wages (PWAGES)
Primary income source welfare (PWELFARE)
Primary income source other (POTHER)
Per capita household income[b] (PERCAP)
Annual household income under $6,000 (LTSIXK)
Annual household income $6,000-$9,000 (MAXNINEK)
Annual household income $9,000-$12,000 (MAXTWLVK)
Annual household income over $12,000 (TWLVKUP)
Respondent currently employed (Q30)
Someone else works to supplement household income (Q113)
Type of work ever done[c] (AMTWORK)

Housing

Rented (HOUSING)
Government-subsidized (SUBSID)

Education

No high school diploma (NOGRAD)
Only high school completed (HSGRAD)
Any college at all (COLLEGE)

Marital

Currently married or living in consensual union (MARRIED)
Never married (NEVMAR)
Divorced, widowed, separated (UNMARR)

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[a] Unless otherwise indicated, these items are coded (0) no; (1) yes.

[b] Per capita income scaled in thousands of dollars per year. Its total household income component, however, can take but one of seven discrete income categories, in $3,000 increments (the highest category is unlimited).

[c] AMTWORK is an odd characterization of "any work" ever done by the respondent, rather than current employment. It is coded (1) part time or seasonal; (2) full time.

Table F-3

SES Item Means, Standard Deviations, Ns[a]

Item	Mean	S.D.	N
Q111.1	.742	.438	450
Q111.3	.735	.442	449
SUPPORT	.291	.454	444
Q111.6	.222	.416	284
PWAGES	.526	.500	441
PWELFARE	.386	.487	441
POTHER	.088	.284	441
PERCAP	2.923	1.115	372
LTSIXK	.532	.500	372
MAXNINEK	.191	.393	372
MAXTWLVK	.126	.333	372
TWLVKUP	.151	.358	372
Q30	.272	.446	404
Q113	.599	.491	456
AMTWORK	1.653	.477	403
HOUSING	.643	.480	459
SUBSID	.241	.428	448
NOGRAD	.482	.500	459
HSGRAD	.362	.481	459
COLLEGE	.139	.347	459
MARRIED	.308	.462	458
NEVMAR	.528	.500	458
UNMARR	.164	.371	458

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[a] There are 466 total N possible; missing data account for the variation in Ns, by item.

Table F-4

SES Inter-item Correlations[a]

	Q111.1	Q111.3	SUPPORT	Q111.6
Q111.3	-.29	-	-	-
SUPPORT	.20	-.02	-	-
Q111.6	.06	-.19	.00	-
PWAGES	.60	-.38	.05	-.09
PWELFARE	-.61	.48	-.16	-.10
POTHER	-.00	-.16	.19	.29
PERCAP	.16	-.04	.08	-.02
LTSIXK	-.25	.14	-.15	-.07
MAXNINEK	.08	-.13	.05	-.00
MAXTWLVK	.10	-.12	.06	.16
TWLVKUP	.17	.07	.10	-.04
Q30	.19	-.16	.01	.12
Q113	.59	-.31	.19	.04
AMTWORK	.01	-.08	.07	-.04
HOUSING	-.21	.20	-.06	-.12
SUBSID	-.15	.20	-.09	.03
NOGRAD	-.08	.07	-.06	.05
HSGRAD	.11	-.07	.05	-.02
COLLEGE	-.05	-.03	-.02	-.06
MARRIED	.23	-.33	.11	.05
NEVMAR	-.10	.21	-.18	-.09
UNMARR	-.15	.13	.10	.06

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[a] Missing data were deleted pairwise in computing correlations.

Table F-4 (cont.)

	PWAGES	PWELFARE	POTHER	PERCAP
PWELFARE	-.83	-	-	-
POTHER	-.33	-.25	-	-
PERCAP	.22	-.20	-.03	-
LTSIXK	-.32	.34	-.01	-.57
MAXNINEK	.11	-.11	.00	-.02
MAXTWLVK	.14	-.16	.03	.21
TWLVKKUP	.20	-.20	-.02	.62
Q30	.17	-.12	-.09	.01
Q113	.49	-.54	.06	.06
AMTWORK	.05	-.02	-.07	.00
HOUSING	-.21	.27	-.08	.04
SUBSID	-.09	.14	-.08	-.11
NOGRAD	-.05	.06	-.01	-.12
HSGRAD	.04	-.04	-.00	.06
COLLEGE	-.01	-.01	.04	.06
MARRIED	.28	-.24	-.07	.05
NEVMAR	-.08	.08	.01	.01
UNMARR	-.23	.19	.07	-.07

	LTSIXK	MAXNINEK	MAXTWLVK	TWLVKUP
MAXNINEK	-.52	-	-	-
MAXTWLVK	-.41	-.18	-	-
TWLVKUP	-.45	-.20	-.16	-
Q30	-.05	.07	.05	-.06
Q113	-.33	.09	.20	.18
AMTWORK	.04	.03	-.00	-.08
HOUSING	.21	-.08	-.08	-.14
SUBSID	.04	.01	-.08	.00
NOGRAD	.08	-.02	-.11	.02
HSGRAD	-.03	-.01	.05	.01
COLLEGE	-.06	.08	.02	-.01
MARRIED	-.16	.15	.17	-.09
NEVMAR	.11	-.15	-.13	.13
UNMARR	.06	.01	-.05	-.05

Table F-4 (cont.)

	Q30	Q113	AMTWORK
Q113	.08	-	-
AMTWORK	.07	-.00	-
HOUSING	-.09	-.34	.05
SUBSID	-.09	.13	-.16
NOGRAD	.01	-.01	-.10
HSGRAD	-.04	.02	.04
COLLEGE	.06	-.02	.06
MARRIED	.18	.35	.12
NEVMAR	.15	-.16	-.21
UNMARR	-.03	-.23	.12

	HOUSING	SUBSID
SUBSID	.14	-
NOGRAD	.01	.03
HSGRAD	-.02	-.01
COLLEGE	.01	-.01
MARRIED	.04	-.09
NEVMAR	-.15	.05
UNMARR	.15	.04

	NOGRAD	HSGRAD	COLLEGE
HSGRAD	-.73	-	-
COLLEGE	-.39	-.30	-
MARRIED	-.08	.02	.04
NEVMAR	.17	-.10	-.07
UNMARR	-.13	.11	.04

	MARRIED	NEVMAR
NEVMAR	-.71	-
UNMARR	-.30	-.47

Table F-5

First 12 Eigenvalues, SES Correlations[a]

A	B	C	D
4.16	4.15	4.15	4.15
2.21	2.21	2.20	2.20
1.93	1.93	1.92	1.92
1.61	1.57	1.57	1.57
1.57	1.31	1.43	1.30
1.30	1.28	1.30	1.24
1.25	1.24	1.24	1.20
1.23	1.18	1.19	1.10
1.07	1.04	1.06	1.03
1.04	1.02	0.98	0.94
0.97	0.90	0.90	0.90
0.90	0.86	0.89	0.81

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[a] Analysis A includes all 23 SES items; B excludes POTHER; C excludes Q111.6; D excludes both Q111.6 and POTHER.

Table F-6

Rotated Loading Matrix,
5 Components, Series A[a]

	I	II	III	IV	V
Q111.1	.75	x	x	x	x
Q111.3	-.59	x	x	x	x
SUPPORT	x	x	x	x	x
Q111.6	x	x	x	x	.65
PWAGES	.80	x	x	x	x
PWELFARE	-.83	x	x	x	x
POTHER	x	x	x	x	.81
PERCAP	x	.85	x	x	x
LTSIXK	x	-.80	x	x	x
MAXNINEK	x	x	x	x	x
MAXTWLVK	x	x	x	x	x
TWLVKUP	x	.77	x	x	x
Q30	x	x	x	x	x
Q113	.73	x	x	x	x
AMTWORK	x	x	x	x	x
HOUSING	x	x	x	x	x
SUBSID	x	x	x	x	x
NOGRAD	x	x	x	-.88	x
HSGRAD	x	x	x	.90	x
COLLEGE	x	x	x	x	x
MARRIED	x	x	.69	x	x
NEVMAR	x	x	-.86	x	x
UNMARR	x	x	x	x	x

---

[a] Numerical entries are only those greater than or equal to .50 in absolute value.

Table F-7

Rotated Loading Matrix,[a]
4 Components, Series B[a]

	I	II	III	IV
Q111.1	.74	x	x	x
Q111.3	-.57	x	x	x
SUPPORT	x	x	x	x
Q111.6	x	x	x	x
PWAGES	.79	x	x	x
PWELFARE	-.82	x	x	x
POTHER	x	x	x	x
PERCAP	x	.85	x	x
LTSIXK	x	-.82	x	x
MAXNINEK	x	x	x	x
MAXTWLVK	x	x	x	x
TWLVKUP	x	.75	x	x
Q30	x	x	x	x
Q113	.72	x	x	x
AMTWORK	x	x	x	x
HOUSING	x	x	x	x
SUBSID	x	x	x	x
NOGRAD	x	x	x	-.88
HSGRAD	x	x	x	.90
COLLEGE	x	x	x	x
MARRIED	x	x	.69	x
NEVMAR	x	x	-.86	x
UNMARR	x	x	x	x

---

[a] Numerical entries are only those greater than or equal to .50 in absolute value.

Table F-8

Rotated Loading Matrix,
5 Components, Series C[a]

	I	II	III	IV	V
Q111.1	.74	x	x	x	x
Q111.3	-.59	x	x	x	x
SUPPORT	x	x	x	x	x
Q111.6	x	x	x	x	x
PWAGES	.79	x	x	x	x
PWELFARE	-.83	x	x	x	x
POTHER	x	x	x	x	.83
PERCAP	x	.86	x	x	x
LTSIXK	x	-.80	x	x	x
MAXNINEK	x	x	x	x	x
MAXTWLVK	x	x	x	x	x
TWLVKUP	x	.76	x	x	x
Q30	x	x	x	x	x
Q113	.74	x	x	x	x
AMTWORK	x	x	x	x	x
HOUSING	x	x	x	x	x
SUBSID	x	x	x	x	x
NOGRAD	x	x	x	-.86	x
HSGRAD	x	x	x	.92	x
COLLEGE	x	x	x	x	x
MARRIED	x	x	.70	x	x
NEVMAR	x	x	-.87	x	x
UNMARR	x	x	x	x	x

---

[a] Numerical entries are only those greater than or equal to .50 in absolute value.

Table F-9

Rotated Loading Matrix,[a]
5 Components, Series D

	I	II	III	IV
Q111.1	.75	x	x	x
Q111.3	-.59	x	x	x
SUPPORT	x	x	x	x
PWAGES	.79	x	x	x
PWELFARE	-.83	x	x	x
POTHER	x	x	x	x
PERCAP	x	.85	x	x
LTSIXK	x	-.81	x	x
MAXNINEK	x	x	x	x
MAXTWLVK	x	x	x	x
TWLVKUP	x	.77	x	x
Q30	x	x	x	x
Q113	.74	x	x	x
AMTWORK	x	x	x	x
HOUSING	x	x	x	x
SUBSID	x	x	x	x
NOGRAD	x	x	x	-.87
HSGRAD	x	x	x	.91
COLLEGE	x	x	x	x
MARRIED	x	x	.67	x
NEVMAR	x	x	-.87	x
UNMARR	x	x	x	x

---

[a] Numerical entries are only those greater than or equal to .50 in absolute value.

Table F-10

INCSOURC and Its Recoding

Original		Recoded	
Value	Frequency	Value	Frequency
-2	92	-1.50	92
-1	47	- .33	127
0	44	.33	138
1	36	1.50	85
2	138		
3	85		

Descriptive Statistics

	Original	Recoded
Mean	0.76	-0.02
S.D.	1.85	0.99
Skewness	-0.36	-0.01
Kurtosis	1.60	2.18
Valid N	442	442

Table F-11

Further Reduction of SES Constructs

Interconstruct Correlations

	INCOME	INCSOURC	EDUCA	MARITAL	HOUSING	SUBSID
INCSOURC	.25	-	-	-	-	-
EDUCA	.08	.08	-	-	-	-
MARITAL	.01	.18	.17	-	-	-
HOUSING	-.12	-.33	-.01	.15	-	-
SUBSID	-.06	-.17	-.03	-.05	.14	-
EMPLOYED	.01	.18	-.01	.15	-.09	-.09

Eigenvalues
1.66
1.23
1.05
.91
.85
.76
.53

	Loadings, First Principal Component
INCOME	.47
INCSOURC	.78
EDUCA	.25
MARITAL	.27
HOUSING	-.56
SUBSID	-.45
EMPLOYED	.41

Table F-12

Rotated Loadings, Three Components, SES Measures

	I	II	III
INCOME	.20	-.09	.69
INCSOURC	.69	.08	.37
EDUCA	-.11	.48	.59
MARITAL	.16	.83	.03
HOUSING	-.59	.46	-.25
SUBSID	-.50	-.02	-.01
EMPLOYED	.62	.31	-.39

Infant Temperament and Parent Comfort

In the fall 1978 Parent Interview (PI 1), a number of items asked about characteristics of the focal child ("infant temperament") and about the mothers' reactions (comfortable or not) to these characteristics. Temperament and comfort items were taken together for data reduction purposes. Table F-13 lists the PI 1 items entering this analysis. Distributions of responses to these items suggest dichotomous recoding before continuing the analysis. Responses to the comfort items are highly skewed (with most responses toward the comfortable end), as are responses to Q68 and Q70 (assessments of the baby's reaction to new people are generally positive; characterizations of the baby are as an "easy" rather than "difficult" child). Responses to the other temperament items seem to be bimodal, so they too were recoded. Only Q67 (concerning the baby's need for attention) requires no recoding. [The comfort items each elicited a "very comfortable" response from more than half of the respondents. These items were recoded to contrast the "very comfortable" responses with all others. It is not clear that the resulting measures assess comfort at all; they may be social desirability measures instead.]

Inter-item correlations are given in Table F-14. It appears that there may be some structure to be exploited in the relationships between the comfort items, since these have moderate intercorrelations. The low intercorrelations among the temperament items, and between the comfort and temperament sets, suggests that they be dropped from this analysis. [The temperament items are retained and reported individually in Chapter 4].

The eigenvalues for the comfort correlation matrix suggest that one construct might do. Eigenvalues and the loading matrix appear in Table F-15. The distribution of the construct implied is shown in Table F-16.

In the spring data collection (PI 3), questions about infant temperament and parent comfort were asked differently; data reduction for each was undertaken separately. A series of 12 temperament items was included (Q37, PI 3): they are listed in Table F-17. Inter-item correlations appear in Table F-18; their eigenvalues are in Table F-19.

It appears that three components would suffice. A three-component rotation was not interpretable, however; a two-component rotation is given in Table F-20. Items entering these two constructs are listed in Table F-21: the second concerns physical problems the children may have; the first seems to reflect parents' problems with children's behavior or characteristics.

There are 10 PI 3 parent comfort items, listed in Table F-22. As with the PI 1 comfort items, responses are highly skewed, with most responses in the comfortable direction. They were recoded, contrasting "very comfortable" responses with all others. Inter-item correlations appear in Table F-23. It seems that one construct could summarize these items. The loadings of items on the first principal component are given in Table F-24. Clearly, there is one general comfort construct implied in the first principal component; items 48 (How do you feel about the baby's reaction to being separated from you?) and 53 (How comfortable are you with the child's health?) are retained for separate analyses in Chapter 4.

The temperament and comfort measures are not independent; their correlation matrix is given in Table F-25.

Table F-13

Infant Temperament and Parent Comfort Items, PI 1

TEMPERAMENT:

Q57:	When is the baby generally hungry? (at unpredictable times: sometimes at predictable times and sometimes not; usually predictable within an hour)
Q60:	In general, how is your baby when eating? (very fussy; somewhat fussy; neither fussy nor happy; somewhat happy; very happy)
Q61:	In general, does your baby go to sleep about the same time every night and wake up about the same time every day? Would you say your baby . . . (has no regular pattern; sometimes has a pattern; has regular pattern)
Q63:	What is your baby's usual mood while being dressed and diapered? Is he/she (very fussy; somewhat fussy; neither fussy nor happy; somewhat happy; very happy)
Q67:	Will the baby amuse himself/herself for a half hour or so or does he/she seem to need attention or a new activity after several minutes? (all the time; . . .; none of the time)
Q68:	Is your baby's reaction to new people usually . . . (very negative; somewhat negative; neither positive nor negative; somewhat positive; very positive)
Q70:	In general, would you say this baby is . . . (a very difficult child; a somewhat difficult child; neither difficult nor easy; a somewhat easy child; a very easy child)

COMFORT:[a]

Q58:	How comfortable are you about the baby's schedule for eating?
Q62:	In general, how comfortable do you feel about your child's schedule for sleeping?
Q66:	How do you feel about your baby's disposition?
Q69:	How comfortable do you feel about your baby's reaction to new people?

---

[a] The COMFORT items are all initially coded: (1) very uncomfortable; (2) somewhat uncomfortable; (3) neither comfortable nor uncomfortable; (4) somewhat comfortable; (5) very comfortable.

Table F-14

Inter-item Correlations, Infant Temperament and Parent Comfort, PI 1

	Comfort						Temperament			
	Q58	Q62	Q66	Q68	Q69	Q70[a]	Q57	Q60	Q61	Q63
Q62	.31	-	-	-	-	-	-	-	-	-
Q66	.29	.30	-	-	-	-	-	-	-	-
Q68	.18	.14	.20	-	-	-	-	-	-	-
Q69	.21	.22	.26	.46	-	-	-	-	-	-
Q70[a]	.23	.26	.40	.16	.25	-	-	-	-	-
Q57	.16	.06	.05	.01	.02	.07	-	-	-	-
Q60	.24	.17	.27	.18	.18	.19	.10	-	-	-
Q61	.10	.36	.14	-.01	-.02	.12	.09	.02	-	-
Q63	.02	.15	.15	.13	.14	.21	.05	.05	.06	-
Q67	-.01	-.08	-.06	.06	-.00	-.01	-.03	-.12	-.07	-.03

[a] Q70 (concerning the baby's general disposition) was grouped with the comfort items on the basis of its higher correlations with these items.

Table F-15

Principal Components, PI 1 Comfort Items

Eigenvalues	Loadings, First Component	
2.29	Q58	.59
1.07	Q62	.60
.82	Q66	.68
.69	Q68	.56
.60	Q69	.65
.53	Q70	.63

Table F-16

Frequencies, PI 1 Comfort Constructs

Value		Frequency
responds "very comfortable" to no comfort question	0	49
	0.17	56
	0.33	71
	0.50	76
	0.67	83
	0.83	77
responds "very comfortable" to all comfort questions	1.00	46
Missing		8

Table F-17

Infant Temperament Items, PI 3[a]

Q37.1:	Your child is extremely active and gets into everything leaving you no time for anything else.
Q37.2:	Your child has feeding problems such as not eating, being a fussy eater, or won't give up the bottle or breast.
Q37.3:	Your child is difficult to comfort or settle down when he/she gets upset.
Q37.4:	Your child doesn't smile or pay attention much to you or to others and doesn't seem to be interested in things that go on around him/her.
Q37.5:[b]	Your child is difficult to toilet train.
Q37.6:	Your child can't seem to play alone and needs someone to play with him/her a lot of the time.
Q37.7:	Your child has a health problem that needs attention often.
Q37.8:	Your child acts up around other people and is difficult to control, making it hard to take him/her places.
Q37.9:	Your child has sleeping problems, won't go to sleep at night, wakes up very early or often during the night.
Q37.10:[b]	Child's brothers and/or sisters are jealous of him/her and have to be watched when they are together.
Q37.11:	Child won't share things with other children.
Q37.12:	Child doesn't do what he is told and needs to be punished.

---

[a] Response scale for all items: (4) often; (3) sometimes; (2) rarely; (1) never.

[b] These two items had large numbers of missing data, probably due to inappropriateness of item content. They were omitted from reduction analyses.

Table F-18

Inter-item Correlations, Infant Temperament, PI 3

	Q37.1	Q37.2	Q37.3	Q37.4
Q37.2	.16	-	-	-
Q37.3	.15	.19	-	-
Q37.4	.07	.13	.21	-
Q37.6	.03	.22	.21	.17
Q37.7	-.01	.21	-.01	.08
Q37.8	.10	.19	.25	.19
Q37.9	.14	.20	.16	.10
Q37.11	-.01	.13	.21	.25
Q37.12	.06	.17	.22	.15

	Q37.6	Q37.7	Q37.8
Q37.6	-	-	-
Q37.7	.05	-	-
Q37.8	.23	.20	-
Q37.9	.16	.16	.22
Q37.11	.13	.03	.21
Q37.12	.21	.09	.37

	Q37.9	Q37.11
Q37.11	.07	-
Q37.12	.08	.24

Table F-19

Eigenvalues, Infant Temperament Correlations, PI 3

Eigenvalues
2.45
1.18
1.07
.91
.88
.82
.76
.72
.63
.58

Table F-20

Rotated Loading Matrix, Two Components, PI 3 Infant Temperament

	I	II
Q37.1	.03	.44
Q37.2	.24	.60
Q37.3	.58	.14
Q37.4	.56	.02
Q37.6	.46	.24
Q37.7	-.02	.59
Q37.8	.56	.35
Q37.9	.11	.64
Q37.11	.66	-.15
Q37.12	.63	.09

Table F-21

Two Temperament Constructs, PI 3

TEMP1:

Your child is difficult to comfort or settle down when he/she gets upset.

Your child doesn't smile or pay attention much to you or to others and doesn't seem to be interested in things that go on around him/her.

Your child can't seem to play alone and needs someone to play with him/her a lot of the time.

Your child acts up around other people and is difficult to control, making it hard to take him/her places.

Child won't share things with other children.

Child doesn't do what he is told and needs to be punished.

TEMP2:

Your child is extremely active and gets into everything leaving you no time for anything else.

Your child has feeding problems such as not eating, being a fussy eater, or won't give up the bottle or breast.

Your child has a health problem that needs attention often.

Your child has sleeping problems, won't go to sleep at night, wakes up very early or often during the night.

Table F-22

Parent Comfort Items, PI 3[a]

Q44:	In general, how do you feel about being a mother these days?
Q45:	How do you feel about (the baby's) personality in general?
Q46:	How do you feel about quieting or comforting (the baby?)
Q48:	How do you feel about the baby's reaction to being separated from you?
Q49:	How comfortable are you with the child's eating habits?
Q50:	How comfortable are you with the child's schedule for sleeping?
Q51:	How comfortable are you with the child's energy and need for attention?
Q52:	How comfortable are you with the way the child minds or obeys you?
Q53:	How comfortable are you with the child's health?
Q54:	In general, would you say this child is?

---

[a] Responses to all items are (1) very uncomfortable, to (5) very comfortable, except Q54, which is (1) very difficult child, to (5) very easy child. All items excepting Q48 and Q53 were recoded, such that (1) indicates a "very comfortable" response, (0) includes all others.

Table F-23

Tau Correlations, PI 3 Comfort Items

	Q44	Q45	Q46	Q48
Q45	.21	-	-	-
Q46	.19	.23	-	-
Q48	.08	.12	.02	-
Q49	.14	.20	.06	.05
Q50	.14	.20	.14	.07
Q51	.19	.25	.24	.08
Q52	.20	.26	.26	.04
Q53	.13	.03	.08	-.02
Q54	.21	.35	.18	.08

	Q49	Q50	Q51	Q52	Q53
Q50	.15	-	-	-	-
Q51	.16	.25	-	-	-
Q52	.26	.09	.19	-	-
Q53	.08	.06	.03	.05	-
Q54	.18	.21	.25	.33	.13

Table F-24

Eigenvalues, PI 3 Comfort Correlations

Eigenvalues	Loadings, First Component	
2.51	Q44	.51
1.06	Q45	.63
.98	Q46	.50
.97	Q48	.20
.92	Q49	.45
.81	Q50	.46
.79	Q51	.57
.72	Q52	.60
.68	Q53	.21
.56	Q54	.65

Table F-25

Correlations Among Infant Temperament and Parent Comfort Constructs, PI 3

	Comfort	Q48	Q53	TEMP1
Q48	.10	-	-	-
Q53	.35	-.02	-	-
TEMP1	-.34	-.12	-.00	-
TEMP2	-.41	-.13	-.26	.32

Aggravation

Two series of questions concerning aggravation appear in the PI 1. Both ask about the frequency of aggravation (4=every week; 3=every month or so; 2=a few times a year or on special occasions; 1=never or almost never); one asks about types of situation (Q100 series), the other about people in different roles (Q105 series). Data reduction was accomplished within each set of items, to retain the situation versus role focus. The situations inquired about are listed in Table F-26. Their inter-item correlations (product-moment) are given in Table F-27; the eigenvalues appear in Table F-28. [With one exception, these items were all recoded to (0) never, (1) occasionally or more frequently. The distributions were highly skewed, originally, with most responses being "never". The one exception concerned the frequency of difficulty with bill-paying; this was recoded (0) never or occasionally, (1) monthly or weekly.] Although it appears that one component would do, no sensible reduction of these items was possible; they were retained for individual analysis in Chapter 4.

The roles that were the focus of an aggravation question are listed in Table F-29. Inter-item correlations (product-moment) are given in Table F-30; eigenvalues appear in Table F-31. Clearly, there is but one general construct here; Table F-31 also contains loadings on the first principal component. The construct of choice combines all five items into one index (HASSLED). Descriptive statistics for this construct appear in Table F-32.

Table F-26

Aggravating Situations, PI 1

Q100.1	Arrange for child care
Q100.2	Find a place to live
Q100.3	Get something fixed or taken care of in your home (such as heat, trash, paint, etc.)
Q100.4	Get a job
Q100.5	Get food or clothes for family
Q100.6	Take care of financial matters or pay bills
Q100.7	Arrange transportation for yourself or your children
Q100.8	Get help or protection from fire, police, or other sources

Table F-27

Correlations Among PI 1 Aggravating Situations Items

	Q100.1	Q100.2	Q100.3	Q100.4	Q100.5	Q100.6	Q100.7
Q100.2	.15	-	-	-	-	-	-
Q100.3	.10	.09	-	-	-	-	-
Q100.4	.15	.11	.05	-	-	-	-
Q100.5	.27	.23	.17	.11	-	-	-
Q100.6	.24	.18	.18	.11	.44	-	-
Q100.7	.25	.19	.15	.15	.24	.23	-
Q100.8	.16	.21	.20	.07	.12	.13	.22

Table F-28

Eigenvalues, PI 1 Aggravating Situations Correlations

Eigenvalues
2.28
1.03
.98
.88
.83
.74
.70
.56

334

Table F-29

Contact with People (Roles) as a Source of Aggravation, PI 1

Q105.1	neighbors
Q105.2	doctors, or people at a health clinic, hospital or doctor's office
Q105.3[a]	people you work with
Q105.4	your own family
Q105.5	your in-laws or other relatives
Q105.6	friends of your children, husband or partner, or other members of your household
Q105.7[a]	children's teachers or other people at school

---

[a] Due to large numbers of missing data (more than 50%), the job and school items were dropped from subsequent analyses.

Table F-30

Correlations Among Aggravating Roles Items, PI 1

	Q105.1	Q105.2	Q105.4	Q105.5
Q105.2	.24	-	-	-
Q105.4	.21	.22	-	-
Q105.5	.26	.30	.32	-
Q105.6	.32	.26	.28	.38

Table F-31

Eigenvalues and Loadings on First Principal Component, Aggravating Roles Correlations

	Loadings	Eigenvalues
Q105.1	.61	2.12
Q105.2	.60	.81
Q105.4	.61	.77
Q105.5	.71	.70
Q105.6	.71	.60

Table F-32

Summary of HASSLED Construct

Mean:	.51
S.D.:	.33
Skewness:	-.06
Kurtosis:	1.83
Minimum:	0
Maximum:	1

Social Contacts

Contacts with people outside the home potentially are important sources of strength or support for parents. A series of questions about frequency of meetings with particular kinds of groups of people were included in the fall 1978 parent interview (PI 1); the items are listed in Table F-33. Inter-item correlations appear in Table F-34, eigenvalues in Table F-35. The first principal component, alone, proved to be an unsatisfactory reduction; loadings on two components (rotated) appear in Table F-36. [These items had highly skewed responses; most respondents answered "never" to all but two of these items. Excepting Q102.3 and Q102.5, the items were recoded (0) never, (1) occasionally or more frequently. The two exceptions were recoded (0) never or occasionally, (1) monthly or weekly.]

The second construct consists only of the two items concerning contacts with friends; the other contains the remaining items (constructs are proportions of items coded (1)). Summary statistics are given in Table F-37; identical items (and constructs) appear in the PI 3.

Table F-33

Frequency of Social Contact Items, PI 1

Q102.1	parent groups associated with school, Head Start, or other child care programs/activities
Q102.2	church groups
Q102.3	social clubs or groups of friends
Q102.4	groups related to work such as unions, bowling teams
Q102.5	clubs, political or special interest groups or organizations
Q102.6	any other groups or sets of friends such as informal card games, get-togethers at local eating places, bars, sporting events or groups

Table F-34

Correlations, Frequency of Contact Items, PI 1

	Q102.1	Q102.2	Q102.3	Q102.4	Q102.5
Q102.2	.06	-	-	-	-
Q102.3	.04	.08	-	-	-
Q102.4	.16	.10	.05	-	-
Q102.5	.08	.19	.18	.26	-
Q102.6	.08	.05	.36	.18	.10

Table F-35

Eigenvalues, Frequency of Contact Correlations

Eigenvalues
1.69
1.13
.99
.87
.76
.57

Table F-36

Rotated Loading Matrix, Two Components, Frequency of Contact, PI 1

	I	II
Q102.1	.48	-.01
Q102.2	.54	-.01
Q102.3	.04	.83
Q102.4	.69	.09
Q102.5	.65	.18
Q102.6	.09	.81

Table F-37

Summary Statistics, Frequency of Social Contact Constructs

	PI 1:		PI 3:	
	Friends	Other	Friends	Other
Mean	.56	.34	.36	.33
S.D.	.41	.26	.31	.26
Skewness	-.24	.57	.28	.49
Kurtosis	1.53	2.96	2.36	2.79
Minimum	0	0	0	0
Maximum	1	1	1	1
r_{12}	.19		.20	

340

Rewarding and Worrisome Situations and Relationships

In the spring 1979 parent interview, a series of eight items were given twice. The first time, respondents indicated how often (during the past six months) the situation or relationship had caused worry, or was something or someone that had to be "dealt with." The second round elicited a similar response, but requested frequency of pleasing rather than worried reactions. The eight items are listed in Table F-38.

As with the comfort and temperament items, this set of items were all recoded to dichotomous choices. Particular recodes depended upon the item in question; the choice made was that which most nearly equally divided the sample. This often simplified what was (already) a bimodal response pattern. For instance, 109 mothers reported "never" being worried about parenting; 62 claimed "rarely;" 123 answered "sometimes;" and 90 said they were "often" worried about parenting. The recode here collapsed "never" with "rarely," and "sometimes" with "often."

Correlations between items within each of the two sets of items appear in Table F-39; eigenvalues are listed in Table F-40. It appears that one construct could summarize each of the two sets of items. Loadings of items on the first principal component are found in Table F-41; clearly, one construct per set is adequate. Table F-42 contains summary statistics for the two constructs. Although they are not independent, these two measures are not highly correlated.

Table F-38

Worried/Pleased Items, PI 3

1.[a] Your school or training for a job
2. Your marriage or relationship with someone important
3. Your financial situation
4. The demands of being a parent
5. Your relationships with family or other household members
6. Your home and/or neighborhood
7.[a] Your job outside the home
8. Your job as a homemaker

---

[a] Due to large amounts of missing data (roughly 33%), these items were dropped from all further analyses.

Table F-39

Inter-item Correlations, Worried/Pleased Items, PI 3

Q67[a]

Item	2	3	4	5	6
3	.22	--	--	--	--
4	.15	.26	--	--	--
5	.29	.21	.34	--	--
6	.24	.18	.32	.28	--
8	.21	.20	.45	.34	.28

Q68[a]

Item	2	3	4	5	6
3	.25	--	--	--	--
4	.22	.14	--	--	--
5	.26	.11	.34	--	--
6	.11	.09	.06	.23	--
8	.21	.15	.26	.32	.21

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[a] Q67 is the "worried " series; Q68 is the "pleased" seried.

Table F-40

Eigenvalues of Two Correlation Matrices

Q67[a]	Q68[a]
2.34	2.02
.92	1.00
.83	.93
.74	.74
.64	.70
.52	.60

Table F-41

Loadings, First Principal Component of Each of Two Correlation Matrices

Item	Q67[a]	Q68[a]
2	.52	.59
3	.51	.43
4	.71	.61
5	.67	.70
6	.61	.43
8	.69	.65

Table F-42

Summary Statistics for Pleased/Worried Constructs

	Q67[a]	Q68[a]
Mean	.47	.53
S.D.	.31	.28
Skewness	.01	-.06
Kurtosis	1.84	2.04
Minimum	0	0
Maximum	1	1
r_{12}	-.17	

---

[a] Q67 is the "worried " series; Q68 is the "pleased" series.

Staff Background Data

A number of checklist-type questions were asked of staff; responses to these sets of questions were reduced with the help of principal components analysis. Analyses of staff background data must be viewed skeptically, however: different groups of staff members are represented at each site. For the most part, at some sites only staff who are connected in some way with the infant-toddler component responded to the staff background questionnaire; at other sites nearly all staff (including Head Start staff) responded.

Two sets of data reductions were undertaken. One was done on the full sample of staff background questionnaires; the second used only those staff who work directly, in a home visiting capacity, with the families in this evaluation (HV sample).

Courses and Workshops

One checklist was used to assess the types of additional training provided for CFRP staff (Q7). The list was repeated to ascertain types of training that staff felt was needed (Q7A). The lists of items appear in Table F-43. These two sets of items were analyzed separately, to retain the provision-versus-need distinction.

The 10 largest eigenvalues, for each of two samples, for the provision series (Q7) are given in Table F-44. It appears that one construct will adequately describe responses to this checklist; Table F-45 confirms this. Excepting items 9 and 15 ("other" and "aging/role of senior citizen"), all items are highly correlated with the first principal component of the correlation matrix. There is but one "additional training provided" measure, in both samples.

When the "additional training needed" items are examined, though, the situation is not nearly so simple. Table F-46 lists the appropriate eigenvalues; multiple components for each sample are required. Table F-47 gives a selected rotated loading matrix for the HV sample; Table F-48 contains the full sample counterpart. Although the results differ slightly between the two samples, they agree in important essentials. The first component seems to tap an indicated need for skills in areas that relate directly to child development (that is, child development; speech/language development; nutrition, parenting skills). Another measure (component III, HV sample; component II, full sample) suggests needs in helping families deal with problematic situations (cultural awareness; human relations; counseling; child abuse). A third measure (component II, HV sample; component IV, full sample) apparently gets at special purpose needs (like health/dental care; day care teaching, curriculum, materials; aging/role of senior citizen; and special education). The remaining measures are less clear.

Table F-43

Courses and Workshops Questions, Staff Background Questionnaire

7) In which of the following categories have you spent 8 hours or more in course work or workshops in the past five years? Include only those which were devoted principally to that subject and which were paid for, sponsored by, or arranged through CFRP. (PLEASE CHECK ALL THAT APPLY)

1. Child Development............ ( )
2. Home Visiting................ ( )
3. Assessment................... ( )
4. Agency Services & Procedures. ( )
5. Speech/Language Development.. ( )
6. Record Keeping............... ( )
7. Health/Dental Care........... ( )
8. Cultural Awareness........... ( )
9. Other (PLEASE SPECIFY)....... ( )
10. Human Relations/Counseling.... ( )
11. Day Care teaching, curriculum, materials......... ( )
12. Nutrition..................... ( )
13. Child Abuse................... ( )
14. Parenting Skills.............. ( )
15. Aging/Role of Sr. Citizen..... ( )
16. Special Education............. ( )

A. Do you feel you need additional training in any of these topics? (PLEASE CHECK ALL THAT APPLY)

1. Child Development............ ( )
2. Home Visiting................ ( )
3. Assessment................... ( )
4. Agency Services & Procedures. ( )
5. Speech/Language Development.. ( )
6. Record Keeping............... ( )
7. Health/Dental Care........... ( )
8. Cultural Awareness........... ( )
9. Other (PLEASE SPECIFY)....... ( )
10. Human Relations/Counseling.... ( )
11. Day Care teaching, curriculum, materials......... ( )
12. Nutrition..................... ( )
13. Child Abuse................... ( )
14. Parenting Skills.............. ( )
15. Aging/Role of Sr. Citizen..... ( )
16. Special Education............. ( )

Table F-44

Q7 Series, 10 Largest Eigenvalues

HV only	Full sample
7.76	6.53
1.48	1.19
1.40	1.18
1.28	1.00
1.08	.92
.66	.82
.63	.76
.49	.68
.40	.54
.27	.48

Table F-45

Loadings on First Component, Q7 Series

Item	HV only	Full sample
1	.65	.69
2	.80	.74
3	.80	.75
4	.63	.64
5	.82	.75
6	.82	.67
7	.85	.73
8	.80	.66
9	-.12	-.02
10	.50	.57
11	.66	.49
12	.85	.69
13	.87	.79
14	.54	.68
15	.29	.21
16	.61	.62

Table F-46

Q7A Series, 10 Largest Eigenvalues

HV only[a]	Full sample[b]
2.72	2.93
2.07	1.51
1.83	1.36
1.63	1.23
1.27	1.02
.96	.98
.72	.88
.52	.75
.43	.73
.42	.63

---

[a] Omitting items 2, 9, 16 due to little variation.

[b] Omitting items 7, 9 due to little variation.

Table F-47

Q7A, Rotated Loadings, 5 Components, HV Sample[a]

	Component				
Item	I	II	III	IV	V
1	.81	x	x	x	x
3	x	x	x	.75	x
4	x	x	x	.62	x
5	.55	x	x	x	x
6	x	x	x	x	.89
7	x	.62	x	−.54	x
8	x	x	.79	x	x
10	x	x	.72	x	x
11	x	.91	x	x	x
12	.59	x	x	x	x
13	x	x	.66	x	x
14	.92	x	x	x	x
15	x	.74	x	x	x

---

[a] Only those numerical entries with absolute values greater than or equal to .50 are shown here.

Table F-48

Q7A Rotated Loadings, 4 Components, Full Sample[a]

	Component			
Item	I	II	III	IV
1	.77	x	x	x
2	x	x	.73	x
3	x	x	.76	x
4	x	x	x	x
5	.57	x	x	x
6	x	x	x	x
8	x	.70	x	x
10	x	.74	x	x
11	x	x	x	.63
12	.58	x	x	x
13	x	.48	x	x
14	.68	x	x	x
15	x	x	x	.59
16	x	x	x	.62

---

[a] Only those numerical entries with absolute values greater than or equal to .45 are shown here.

Contact with Families

Another checklist (Table F-49) concerns kinds of contact with families. These items can be reduced somewhat; eigenvalues are listed in Table F-50. Rotated loading matrices are shown in Tables F-51 and F-52. Here there is little congruence between the results in each sample; since the home visitor sample was selected (in part) on the kind of work they do with families, this should not be too suprising.

The four measures derived for the HV sample suggest an ancillary service dimension, a parent-focused measure, a general information-provision type of contact, and a child-focused measure, respectively. These interpretations are far from straightforward, however. The measures suggested by the full sample analysis are no more enlightening: a general service- and information-provision dimension, a parent- (or family-) focused measure, and a child-focused measure are suggested, respectively.

Table F-49

Kinds of Contact with Family

13) How often do you have direct contact with the families assigned to you?

☐ Times/Week

A. What kind of contact do you have with the family? (CHECK ALL THAT APPLY)

____	Home visit	(1)
____	Service coordinator	(2)
____	Meetings with parent groups	(3)
____	Meetings with infant-toddler group	(4)
____	Providing services	(5)
____	Providing information	(6)
____	Classrooms for children only	(7)
____	Transportation	(8)
____	Other	(9)

Table F-50

Q13A Series, Eigenvalues

HV only[a]	Full sample
2.04	1.97
1.68	1.27
1.20	1.25
.98	1.04
.79	.87
.58	.75
.46	.73
.26	.60
	.53

---

[a] Item 1 (home visit) omitted from HV analysis; all of the home visitors do home visits.

Table F-51

Q13A Rotated Loadings, 4 Components, HV Only[a]

	Component			
Item	I	II	III	IV
2	x	.76	x	x
3	x	.81	x	x
4	x	x	x	.97
5	.77	x	x	x
6	x	x	.80	x
7	x	x	.65	x
8	.61	.55	x	x
9	.79	x	x	x

Table F-52

Q13A Rotated Loadings, 3 Components, Full Sample[a]

	Component		
Item	I	II	III
1	x	.76	x
2	.69	x	x
3	x	.64	x
4	x	x	-.59
5	.64	x	x
6	.64	x	x
7	x	x	.58
8	.58	x	x
9	x	x	.64

---

[a] Only those numerical entries with absolute values greater than or equal to .50 are shown here.

Parent Groups and Classes

A third checklist solicited information on the kinds of parent groups or classes that staff members run. Table F-53 lists the items, Table F-54 the eigenvalues.

While it seems as though one component might do a reasonable job of summarizing these items, it was not suitable, actually. Tables F-55 and F-56 show selected rotated loading matrices. Again, the results vary across samples (and, again, this should not be too surprising).

The HV sample reduction is reasonably clear: the first measure contrasts homemaking or crafts classes with groups of different but substantive content; the second measure taps yet another kind of parent group (policy advisory, recreational or social, minus "other"); and the third simply concerns "prenatal or infant education." The first three measures implied in the full sample reduction distinguish three types of parent meetings or groups (parenting or child developmental/educational; support, counseling, or social/recreational; adult educational or crafts); the fourth consists only of the policy advisory item.

Table F-53

Kinds of Parent Groups, Classes Run by Staff

17) Do you presently run any parent groups or teach any classes associated with CFRP?

Yes ( ) (Please answer A)
No ( ) (Go to Question 18)

IF YES, ASK A:

A. What kind of groups or classes are they? (CHECK ALL THAT APPLY)

1. Parenting skills classes . . . .( )
2. Child development classes. . . . .( )
3. Prenatal or infant education classes . . . .( )
4. Adult education classes (including English).( )
5. Crafts or homemaking classes . . . .( )
6. Job skills or vocational training. . . . . .( )
7. Parent support or counseling groups. . . . .( )
8. Parent-child groups. . . . .( )
9. Parent recreational or social groups . . . .( )
10. Policy advisory or meetings. . . . .( )
11. Other (specify) ______________________________ .( )

____

Table F-54

Q17A, Eigenvalues

HV only[a]	Full sample[b]
3.07	3.89
1.66	1.54
1.10	1.14
.77	1.08
.22	.78
.15	.59
.04	.39
	.30
	.18
	.12

---

[a] Item 1,2,4, and 6 omitted due to little variation.

[b] Item 6 omitted due to little variation.

Table F-55

Q17A Rotated Loadings, 3 Components, HV Only[a]

	Component		
Item	I	II	III
3	x	x	.97
5	-.73	x	x
7	.93	x	x
8	.97	x	x
9	x	.73	x
10	x	.74	x
11	x	-.67	x

Table F-56

Q17A Rotated Loadings, 4 Components, Full Sample[a]

	Component			
Item	I	II	III	IV
1	.88	x	x	x
2	.89	x	x	x
3	.74	x	x	x
4	x	x	.74	x
5	x	x	.80	x
7	x	.85	x	x
8	x	.72	x	x
9	x	.62	x	x
10	x	x	x	.85
11	-.69	x	x	x

---

[a] Only those numerical entries with absolute values greater than or equal to .50 are shown here.

The final series of checklists concern the kind of work that staff do in each of these three program components. The items are listed in Table F-57; appropriate eigenvalues are in Table F-58. Clearly, one construct alone will be insufficient for summarizing these data. No clear reduction in the HV sample was possible; one selected rotated loading matrix appears in Table F-59.

The full sample reduction is much more satisfying; it suggests that staff differentiate their roles by function rather than by program component (Table F-60). The constructs implied are easily interpreted. The first is a management or supervisory role; the second contrasts a training function with a direct service-provision job; the third is "other"; the fourth and fifth measures tap children- and parent-specific functions, respectively.

Table F-57

Kinds of Work Within Program Components[a]

14) Do you work with the infant-toddler center/component?
Yes ( ) Please answer A, B, C below.
No ( ) Please go to Question 15.

15) Do you work with Head Start centers?
Yes ( ) Please answer A, B, C below.
No ( ) Please go to Question 16.

16) Do you work with the preschool-school linkage component?
Yes ( ) Please answer A, B, C below.
No ( ) Please go to Question 17.

A. What do you do in this component? (CHECK ALL THAT APPLY)
1. teach or care for children only. . . . . ( )
2. teach or work with parents only. . . . . ( )
3. teach or work with parents and children together ( )
4. train staff. . . . . ( )
5. meet/plan with other staff about general CFRP families. . . . . ( )
6. meet/plan with other staff about specific CFRP families. . . . . ( )
7. observe or supervise . . . . ( )
8. provide some service (transportation, screening etc. . . . . ( )
9. other (specify) ______________________________ ( )

---

[a] Note that there are three sets of identically worded items, one for each program component.

Table F-58

Ten Largest Eigenvalues, Q14A, Q15A, Q16A Series.

HV only[a]	Full sample[b]
4.01	5.85
2.55	3.54
1.55	2.51
1.29	2.10
1.13	1.74
.68	1.31
.62	1.13
.44	1.02
.32	.79
.23	.70

---

[a] All Q16A items omitted due to high missing data rates. Items 14A1, 14A9, 15A1, and 15A9 also omitted due to very little variation in response.

[b] Item 14A1, 15A1 and 16A1 omitted due to very little variation in responses.

Table F-59

Rotated Loading Matrix, 5 Components, HV Sample[a]

	I	II	III	IV	V
14A2	x	.51	.67	x	x
14A3	x	-.91	x	x	x
14A4	x	x	x	-.92	x
14A5	.86	x	x	x	x
14A6	.89	x	x	x	x
14A7	x	x	x	x	.72
14A8	x	x	.92	x	x
15A2	x	.86	x	x	x
15A3	x	x	-.90	x	x
15A4	x	.x	x	x	x
15A5	.60	x	x	x	x
15A6	x	.x	x	.71	x
15A7	x	x	x	x	.84
15A8	.65	x	x	x	x

---

[a] Only those entries with absolute value greater than or equal to .50 are shown here.

Table F-60

Rotated Loading Matrix, 5 Components, Full Sample[a] (Q14A, Q15A, Q16A series)

	Component				
Item	I	II	III	IV	V
14A2	x	x	x	.75	x
14A3	x	x	x	x	.63
14A4	x	.77	x	x	x
14A5	.78	x	x	x	x
14A6	.77	x	x	x	x
14A7	.54	x	x	x	x
14A8	x	-.68	x	x	x
14A9	x	x	.84	x	x
15A2	x	x	x	.89	x
15A3	x	x	x	x	.82
15A4	x	.68	x	x	x
15A5	.61	x	x	x	x
15A6	.76	x	x	x	x
15A7	.57	x	x	x	x
15A8	x	-.55	x	x	x
15A9	x	x	.88	x	x
16A2	x	x	x	.91	x
16A3	x	x	x	x	.71
16A4	x	.77	x	x	x
16A5	.81	x	x	x	x
16A6	.82	x	x	x	x
16A7	.54	x	x	x	x
16A8	x	-.57	x	x	x
16A9	x	x	.84	x	x

---

[a] Only those entries with absolute value greater than or equal to .50 are shown here.